

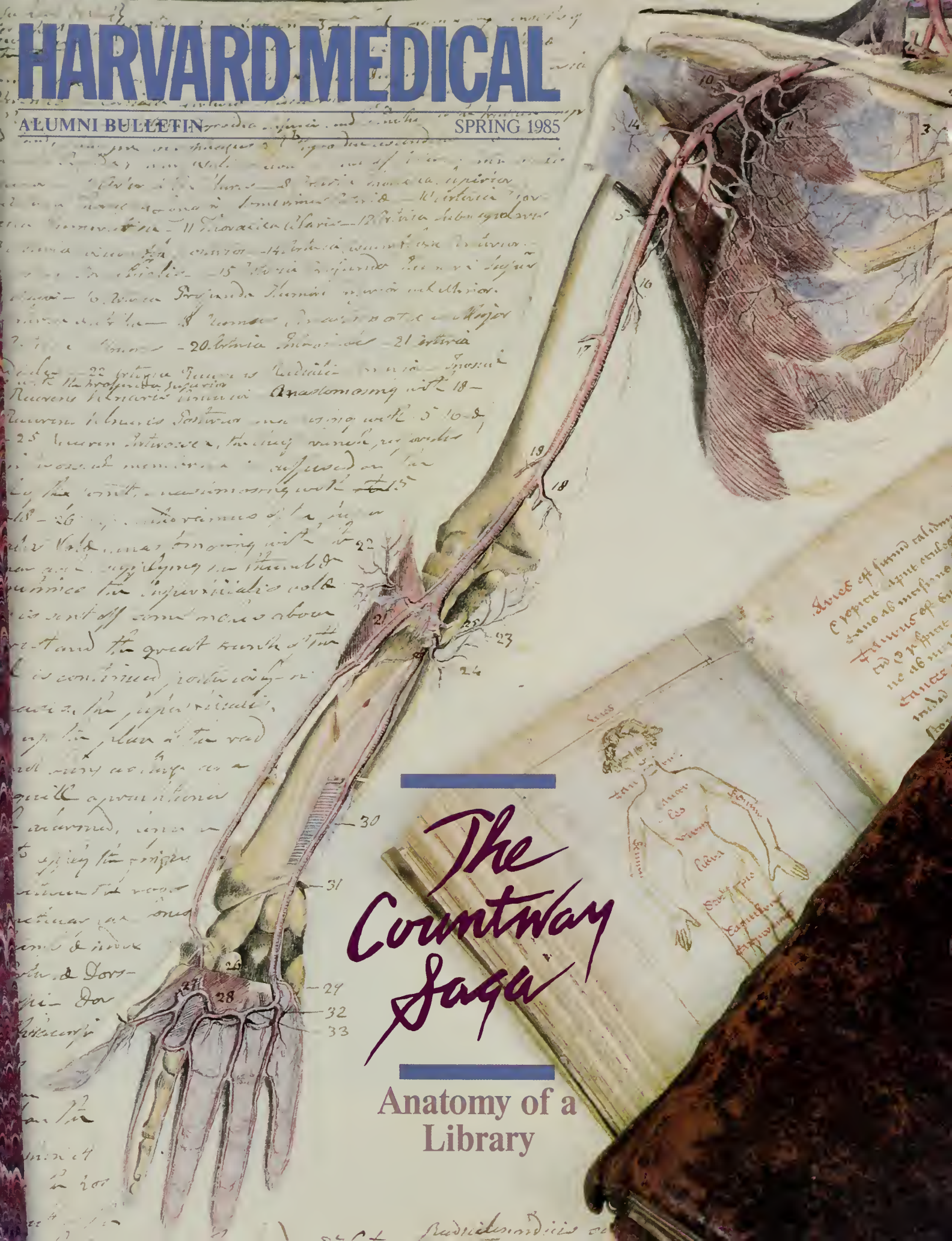
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ALUMNI BULLETIN

SPRING 1985

The Countway Saga

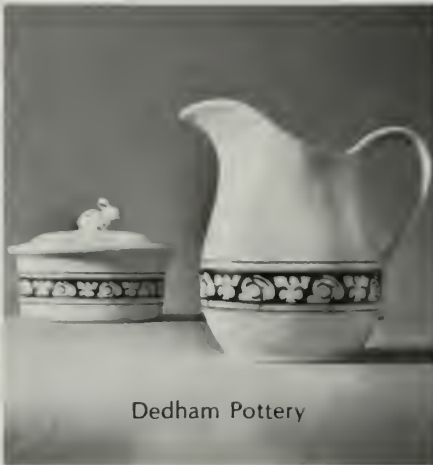
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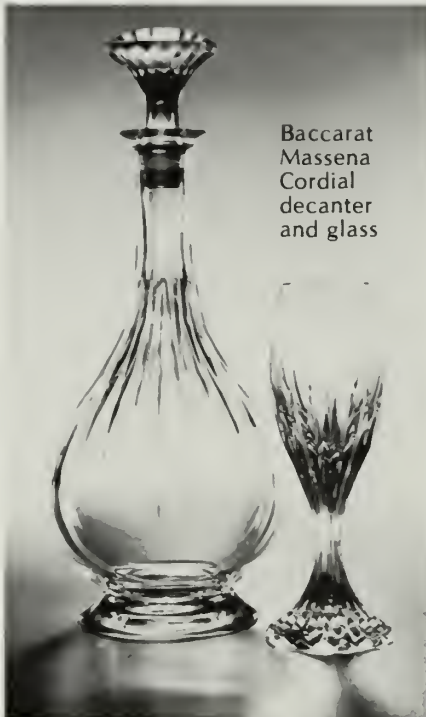
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Cover: Some of the treasures of Countway Library. Large page is from an anatomical manuscript, constructed in telescoping overlays to show muscle layers and the bones beneath, by Scottish physician Alexander Ramsay (1754-1824). On top is an English medical manuscript, circa 1450, opened to a figure marked with points for bloodletting. Lower right corner: an 18th-century binding. Photograph by Ed Malisky.

INSIDE H.M.A.B.

We all know that an individual's name can become so linked with a place or thing that the identity of the person is lost. To many, Kennedy has become an airport. On the Harvard scene, Countway is a library. But Francis Countway and his sister, Sanda, were people, and Lisa Drew calls them back to us in the pages that follow. The cover proclaims just a sample of the uncounted treasures of the library; the text describes the place and the people who work there. And over all hovers the presence of George Packer Berry, dean of HMS from 1949 to 1965, and the late Robert Cutler. Dean Berry is now virtually housebound in Princeton, but he knows what we are up to, and we hope he will approve our efforts.

Later in this issue we correspond with Alice Hamilton, one of Harvard's, indeed one of womankind's, great figures in medicine. In selected letters we learn of the formative years that led her into a profession of which her family did not entirely approve, at least for young women. In another context, you may recall, it was Alice Hamilton's pacifism that bothered many. Here is her vision of war: "It is as if we had stood at the edge of an awful swamp and seen our friends struggling in it, and the militarists had said we must jump in and help them out, and the pacifists that we must try to build a bridge over, though no bridge had ever been built before."

But before we come to Alice Hamilton we hear from a group of students and look at our Caribbean and Nicaraguan neighbors through their unjaundiced eyes. And there is a quick glance at the Third World of Africa.

A piece by the late Norman Geschwind '51, called away alas too soon, examines the educational process and *idiots savants*. Will the New Pathway protect us from the first half of that term? And we don't leave the mind alone, but have asked John Nemiah '43B from the hills of New Hampshire to recall another earthshaker in the neurosciences, Stanley Cobb '14.

And finally, the Alumni Survey Committee Report on the performance of HMS graduates in residency training. Admissions committees agonize over students' entry into medical school. What happens when they depart these halls? Read on down.

— J. Gordon Scannell

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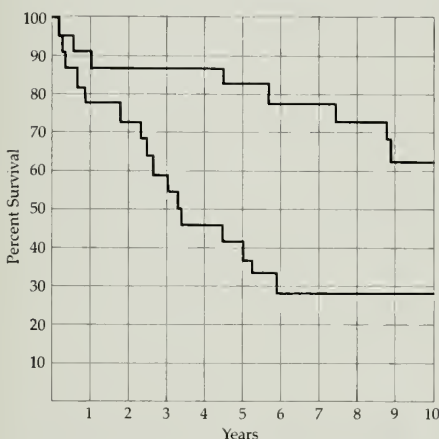
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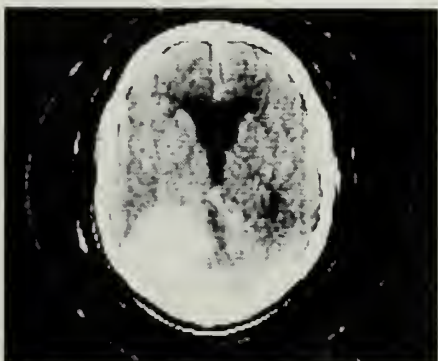
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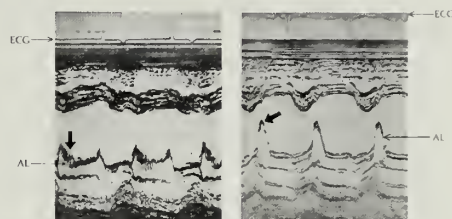
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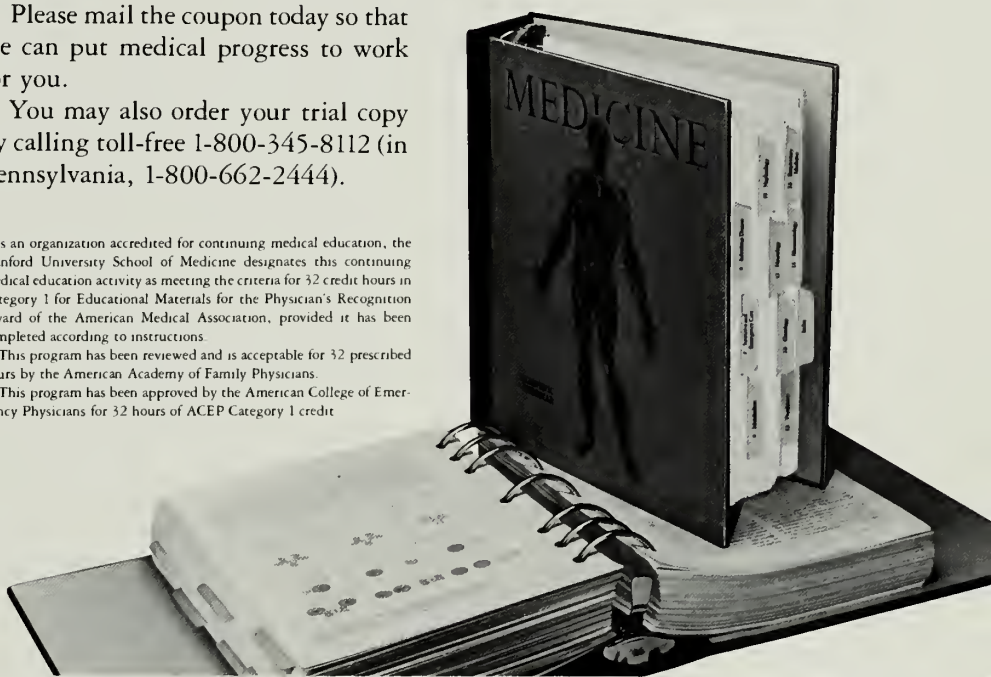
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Similar Experiences

Lessons for the New Pathway

I enjoyed the opportunity to learn about the New Pathway Program in General Medical Education in the last issue of the *Bulletin*. An experiment very similar in spirit was instigated by students in the Class of 1968. During the fall semester of our second year, a small group of students led by Andrew Weil and me wrote Dean Ebert to explain our concern about the passive way we were asked to learn and the excessive time devoted to formal classroom instruction. We proposed an independent study group for the spring semester, and after some negotiation, he accepted. The ground rules were simple: we agreed to take the regular examinations, were excused from all formal classes, and were given a faculty tutor with whom we could plan our learning. All class members were invited to join; 25 eventually participated.

Our independent study group was a great success. In spite of concerns raised in local newspapers and *Time* magazine, we apparently performed as expected on exams even with little or no attendance at lectures. Top instructors volunteered to be our tutors. Whether due to the freshness of our experiment, the opportunity for more personal input in our learning, or a preference for reading and discussion over lectures, we found our independent study group a more enjoyable learning experience than the regular curriculum.

There were problems: open hostility from some faculty outside our group prevented our tutors from preparing the 1966 versions of "Curriculum Content Guides," and students in the regular curriculum complained that we received special treatment, in part because we always seemed to get the best instructors.

There may be some lessons from our experience for the New Pathway. First, the Oliver Wendell Holmes Society is a guaranteed success, if only because of its novelty, but more likely because it will meet a real need. Second, the Holmes Society may not be for everyone: some students favor lectures and may even learn more the old way. Third, a two-class system will almost surely generate some jealousy and hard feelings on both the student and faculty level.

—Thomas D. Pollard '68

The recent article (Winter 1984) describing the New Pathway Project in General Medical Education failed to touch upon what may be the major stumbling block to this ambitious reform: How will we find clinical faculty to serve as preceptors in this system?

One year ago I was a member of a committee charged with outlining the clinical aspects of the New Pathway curriculum. Much discussion was devoted to the idea that small groups of students would meet with a clinical preceptor two to three times a week, through the full four years. If the New Pathway were expanded to include all medical students, there would be need for approximately 140 clinical preceptors.

The time commitment required of a clinical preceptor would be significant—perhaps 10 to 20 hours per week. A busy member of the clinical faculty who is already involved in patient care, house-staff teaching, and research would have to sacrifice some activities in order to participate. Most faculty would probably retain their clinical responsibilities, since they would not want to force their colleagues to accept a heavier workload.

Hence, the time a preceptor could devote to his or her research would probably be diminished.

At an institution in which the criteria for promotion are defined almost entirely in terms of research achievements, why would anyone volunteer to be a preceptor? At one of our meetings we asked the dean whether any special provisions were being considered to acknowledge and reward good teaching in the New Pathway. He responded that none were being considered, and I sensed that he truly felt none were necessary.

In discussions since that time with a number of clinical faculty, I have found that many would consider it academic suicide to make such a heavy commitment to teaching at the expense of their research. Although it is not uncommon to hear about the great value HMS places on high-quality teaching (especially when there has been some research scandal), the fact remains that promotion at HMS is based almost completely upon quantity of research. If we are truly to embark upon a "New Pathway," let us begin by recognizing good teaching when we find it and rewarding it in tangible ways. Otherwise, I am afraid the new curriculum will be doomed to failure before it even begins.

—Richard Schwartzstein '79

Origin of Sexism

I feel moved to comment on the remarks of Doris R. Bennett '49 in the Fall 1984 *Bulletin*.

In her review of the advances made by women in the field of medicine, Bennett notes the relative scarcity of women professors and administrators and says "one would expect more." In looking for the reasons for



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this lack she writes that, in her opinion, "sex discrimination is *not* high on the list. I'm almost certain that high academic posts are awarded to the candidates with the best credentials, regardless of gender. The real issue is that fewer women than men achieve the 'best credentials.' "

I respectfully disagree with Bennett. Sexism does not begin (nor does it end) with selection for the highest levels of academic life. It is made up of hundreds of small choices and decisions in the careers of women physicians. Sexism begins with the attitudes and expectations of society at large, which are reflected in the career advice given young girls at all academic levels. It affects assignment of students to labs and clinical rotations and the expectations of teachers and others who rate them, and it becomes a factor in choices for fellowships, residency positions, junior faculty appointments, and promotions. Even more important, sexism can influence a woman doctor's expectations of herself and the level of recognition to which she dares aspire.

Societal stereotypes of women as more intuitive than men and therefore less capable of logical thought and less able to be effective managers will relegate new generations of women physicians to the lowest hierarchical levels of medical practice and exclude them from leadership roles. Mere numbers of females in medicine will not automatically lead to equality. I hope all thinking people concerned with the future of medicine will support social change aimed at eradicating sexism in its subtler as well as its more overt forms. Both medicine in particular and American life in general cannot but profit from such a change.

—Sheila B. Blume '58

The Case for Hope

Kim Atwood '79 and his wife, Deborah, in their recent two-part piece for the *Bulletin* (Winter 1984), address a subject to which I would like to respond. Kim and I share similar experiences: people we love dearly have been hit by a car (a year apart) and severely injured. They are Deborah Atwood and Taft, my son, who was four and a half at the time of his accident.

My son has not made Deborah's astounding progress. He was comatose longer, and has been afflicted with various complications and setbacks. But he is consistently making progress, and has far surpassed the vegetable state that most doctors condemned—even swore—him to.

It has been a year and a half since the accident. A great deal of Taft's loving, sweet personality is returning. He responds to many commands, and smiles and tries to communicate to people around him. He even tries to feed himself with a spoon. His tracheostomy tube has been removed, sooner than expected (pneumonia made a tracheostomy inevitable), so we are working diligently on encouraging him to talk. He tries hard, and responds at the appropriate time, though only with inflections and utterances. Still, we know he wants to communicate.

Enough background. I want most to write about hope—that one state of mind that seems to elude the doctors (many with Ivy League credentials) we've consulted. In addition to not professing or encouraging hope, they have tried to strip it from us—in some instances brutally.

We are told that each and every case is individual, yet we are given a "prognosis." One does not follow from the other. We submit that so little is known and understood about the marvelous brain that there is no authority on the subject—at least no soothsayer. Taft's progress has consistently exceeded his prognoses. If we had believed what so many of the doctors told us, and had followed their advice—to institutionalize Taft in a maintenance facility—Taft would indeed be a vegetable.

What is wrong with hope? What difference should it make to a doctor that relatives of a brain-injured individual continue to cling to a shred and a prayer? Why can't that be "allowed"? Are doctors so ego-fragile that they feel their honor, intelligence, and dignity are slighted when others hope beyond the boundaries of medical knowledge?

Certainly some distraught families cry out for a prognosis and for guidance. But there is no certainty about head trauma (except obvious brain death), and so there is a simple answer to those fishing for hope: "I don't know what will happen." Is this answer a lie? Does anyone "know?" Perhaps

doctors do not realize their power to persuade, convince, even destroy.

The greater question is what has happened to doctors' sensitivity and empathy, their basic human kindness. Are they becoming a separate species? (And I ask this question as a member of a medical family.) I think something is seriously missing in the education of medical students. Perhaps something is missing in the criteria used to select students to medical schools.

Even when we changed hospitals, attitudes didn't improve (although we have received some support and optimism at a rehabilitation center). The negative attitudes of the residents were astounding. When Taft developed pneumonia (a side effect from medicines which suppressed his gag reflex), one resident in the Intensive Care Unit suggested we allow him to die, since he was in such bad shape and would not recover.

Taft has improved 200 percent since that visit. We are working on the next double installment, and we have no plans to quit.

I hope that HMS, as well as other medical schools, will look long and deeply into its preparatory process for physicians, and teach them the limits as well as the greatness of medical knowledge.

—Barbara G. Morris
Pittsboro, North Carolina

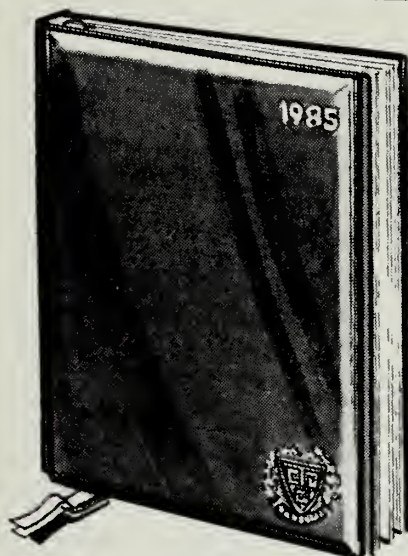
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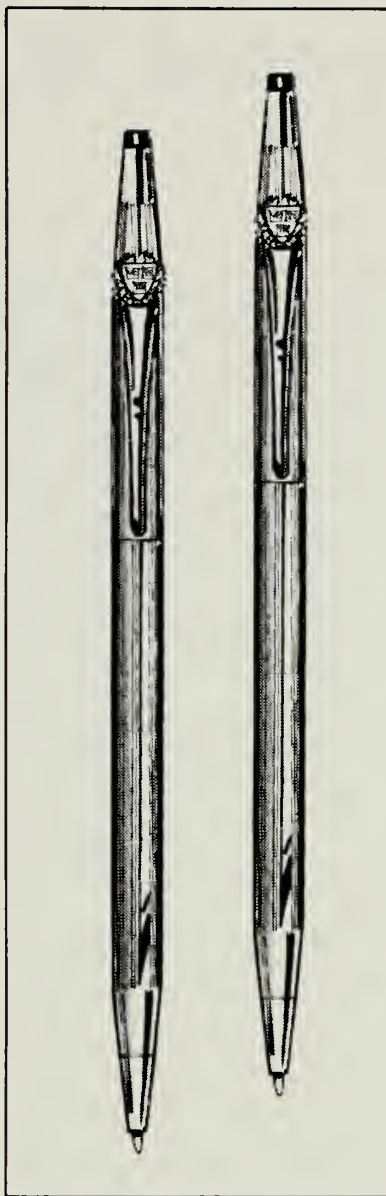
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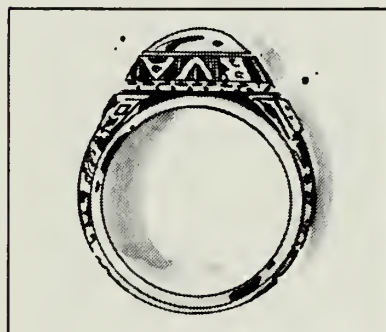
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BOOK MARKS

Away with Benevolent Silence!

THE SILENT WORLD OF DOCTOR AND PATIENT, by Jay Katz, M.D.,
The Free Press, New York, 1984

by Robert S. Lawrence '64

Having entered medical school in 1960 and learned the phrase "informed consent" along with thousands of other new words and pieces of jargon, I was startled to read in *The Silent World of Doctor and Patient* that it was first used in 1957. Justice Bray of the California Court of Appeals wrote the opinion in *Salgo v. Leland Stanford Jr. University Board of Trustees*, the case of a 55-year-old man who was paralyzed following aortography. The man was admitted with intermittent claudication; the then new procedure of aortography was used in an attempt to identify the presumed arterial obstruction; and after receiving an injection of sodium urokon the patient awoke the following day paraplegic. His lawyers claimed that the physicians had negligently failed to warn him of the risks of paralysis inherent in the procedure.

Ironically, in reversing the trial court's judgment for the defendants, Justice Bray adopted verbatim the informed consent paragraph from the *amicus curiae* brief submitted by the American College of Surgeons. The words he used—without attribution—were:

A physician violates his duty to his patient and subjects himself to liability if he withholds any facts which are necessary to form the basis of an intelligent consent by the patient to the proposed treatment... in discussing the element of risk a certain amount of discretion must be employed consistent with the full disclosure of facts necessary to an informed consent.

That discretion and full disclosure should appear in the same sentence is but one of many fascinating paradoxes Jay Katz discusses in this highly informative book. As a psychoanalyst member of the Yale Law School faculty, he brings a unique perspective to medical history, combining a psychodynamic appreciation for irony and paradox with a legal scholar's quest for precedent and justice. He traces the origins of benevolent silence to Hippocrates's admonition that the effective clinician should reveal "nothing of the patient's future or present condition." For the next 1,500 years, Katz argues, the patient-doctor relationship was shaped by three doctrines, all of which undermined the opportunity for dialogue and for sharing the burdens of decision: that patients must honor, have faith in, and promise obedience to their physician.

During the Age of Enlightenment a few physicians called for more openness and honesty in dealing with patients, but the context remained that of the physician telling the patient rather than engaging him or her in conversation and dialogue. Only in 1981 did the first reference to rights of self-decision appear in the AMA's "Current Opinions of the Judicial Council"—rights that require sufficient information to make an intelligent choice.

Katz emphasizes that the silence between doctors and patients is rooted in the highest ethical commitment to caring custody. In the pre-scientific era of medicine, the placebo effect was often all a physician could offer a patient. So long as the doctrine of *primum non nocere* was not violated, benign silence might almost seem justified. Katz argues cogently that the reverse is now true, and that physi-

cians should no longer ignore the reality that silence is tantamount to abandonment in the doctor-patient relationship.

The heart of the book addresses the enormous barriers to genuine conversation and decision-sharing with our patients. First, there is the need to share authority with patients, a sharing that presupposes a willingness to trust. Physicians worry that joint decision making will expose to the public the "vexing problems about the state of the art and science of medicine... that a better appreciation of the uncertainty of medical knowledge will only make patients anxious and confused."

The right to individual self-determination dominates Western political, philosophical, moral, and legal thinking. Medicine's reluctance to adopt this notion reflects the profound belief that persons lose their capacity to make decisions when they become patients, that the impact of illness and the fear of death immobilize patients and render them incapable of understanding complex medical choices.

Katz argues that the struggle over rights and capacities and the obligation for conversation with patients should be understood in the context of transference and counter-transference and in the shared confrontation of knowledge and ignorance. The ideas are empowering, the concepts intellectually stimulating, and the challenge for implementation worthy of our best efforts. Combined with recent advances in the science of decision analysis, this book provides valuable insight into the moral, ethical, and philosophic dimensions of the modern doctor's dilemma. □

Hewlett-Packard Gift to New Pathway

Hewlett-Packard Company has pledged a five-year, \$5 million grant of computer equipment and money to Harvard Medical School in support of the New Pathway Project in General Medical Education (see related story on Exxon grant). Hewlett-Packard's gift makes possible a long-held aim of the New Pathway planners: to make computer-based learning and communication an integral part of the program.

This year Hewlett-Packard will provide an HP 3000 computer system, 60 personal computers, five portable computers, printers, accessories, software, and \$250,000 to fund Harvard personnel who will develop and support the computerized curriculum. All New Pathway students and faculty will have their own computers.

In the four succeeding years, the company—a leading designer of electronic testing and measuring devices used in medical diagnosis, treatment,

and monitoring—will provide additional cash support, personal and portable computers, and upgraded hardware as it becomes available.

So far, G. Octo Barnett, professor of medicine and chairman of the New Pathway's Information Technology Committee, and his colleagues at Massachusetts General Hospital have developed computer programs simulating diagnostic processes and medical interventions. With heavy input from New Pathway faculty and students, they will develop basic science programs using graphics—for example, a program that teaches recognition of normal and abnormal cells and tissues. Students are also expected to use the computers for bibliographical services, central database access, electronic mail, word processing, and personal filing.

At a press conference called to announce the gift, Benjamin L. Holmes, general manager of the Medical Products Group of Hewlett-Packard, said: "What Harvard has conceived here in the New Pathway program promises to revolutionize medical education. We see the need for this, and we see the wisdom of turning to computer capabilities as part of the new educational approach."

"Information technology is only one part of the New Pathway program," commented Barnett, "but it makes the learning experience much richer. Medicine requires tremendous amounts of skills and information to be learned in a short time. Computer technology facilitates this learning and makes it more enjoyable."

"We do not see this development in computer technology as confined to 25 students," projected Dean Tosteson. "We see it as a first step that will ultimately be extended to all our students." □

New Pathway Awarded Exxon Funds

A \$500,000 award was recently made by Exxon Education Foundation of New York in support of HMS's New Pathway Project in General Medical Education.

According to president Robert L. Payton, Exxon Foundation is "concerned about the narrowing of focus of many aspects of professional education. Such narrowing has a dehumanizing quality and interferes with the professional's ability to understand the full complexity of problems and situations. In its respect for the non-technical aspects of the physician's education, the New Pathway's efforts captured our attention. We were also impressed with the thoughtfulness of the faculty's approach to the new curriculum, the range of its intellectual diversity, and the kinds of questions being asked." Exxon Foundation has long been a believer in broadening the training of professionals and fostering a sense of social service as an integral part of education in law, medicine, business, engineering, and other graduate specialties.

The New Pathway is due to enroll its first 25 students, members of the new Oliver Wendell Holmes Society, in September (see feature article in Winter 1984 *Bulletin*). They will practice seeking out information, testing hypotheses, and solving problems in a process similar to that of experienced clinicians and researchers. The approach will be a pioneer foray into the extensive use of such learning through the full four years of medical school, for both the clinical and basic sciences, to prepare students for advanced study in any field of medicine or research.

Within their first two weeks,



Octo Barnett explains one of the clinical teaching programs.

Holmes Society students will see patients; within a month, each will make contact with a faculty member to follow ambulatory patients on a continuing basis. Emphasis will be made on developing "doctoring" and reasoning skills, and on understanding the implications of physician's changing roles. Computers will be important learning and reference tools (see related story on Hewlett-Packard gift).

Sixty percent of student time in the New Pathway will be devoted to a common curriculum that will include such areas as doctor/patient relationships, human biology, the life cycle, and experiences in patient care—with no more than one lecture a day. Students will meet several times each week for problem-based learning tutorials, and will maintain steady communication with faculty members. The remaining 40 percent of the time will be used for elective courses and independent study leading to a thesis. Admission to the Oliver Wendell Holmes Society is on a voluntary basis; as many as 25 students from the entering class can opt to be members. If more than this number express interest, a random stratified sampling will be drawn, taking sex and minority status into consideration. □

Raj Goyal Named First Rabb Professor

The first Charlotte F. and Irving W. Rabb Professorship of Medicine—one of several major gifts the Rabb family has given to Beth Israel Hospital during the past half-century—was recently awarded to Raj K. Goyal, professor of medicine and chief of gastroenterology at BIH.

Goyal, who has been affiliated with HMS and BIH since 1981, has worked for nearly 15 years studying the neural, hormonal, and muscular factors involved in swallowing, transporting food to the stomach, and preventing backup of stomach acid. He directs a clerkship on gastroenterology for HMS students and is co-director of the Continuing Education course "Update in Gastroenterology."

Irving Rabb's inspiration for endowing the new chair stemmed from his firsthand knowledge of hospital funding, acquired during his tenure as BIH president from 1967 to 1970. He learned then, to his dismay, that

teaching at BIH by Harvard faculty was funded primarily by "soft" money. "I found it frightening to realize that the program depended on the availability of government and private resources," he explains. "It became obvious that the biggest need for the education program was long-range funding through the establishment of chairs. In that way commitments



Raj K. Goyal

could be made to people we wanted to attract."

The Rabbs hope their gift will help "anchor down" future medical education. "We're concerned about the funding of medical education in the years to come," says Irving Rabb. "I value the academic freedom of Harvard, and the more faculty support that can be funded in this way, the more security we can have with less dependency on government. Endowing a chair can go a long way toward assuring the quality of education. We hope other people will be stimulated to think in the same direction and do likewise."

"Harvard has always been a very important factor in our lives," confirms Charlotte Rabb. "In my view it has represented the epitome of everything that is important intellectually, culturally, scientifically, and in just about every field."

Raj Goyal, whom Dean Tosteston describes as "not only an outstanding clinician but also an exceptional scholar and person," has contributed greatly to knowledge of gastrointestinal tract function and to understand-

ing of the neurochemical control by the vagus nerve of other organs.

Much of his work has involved studies of the lower esophageal sphincter at the junction of the esophagus and stomach. In contrast to most muscles, which contract when stimulated, this sphincter remains contracted when left to itself. When stimulated, as during swallowing, it relaxes to allow food to pass into the stomach. In 1980 Goyal and his colleague Satish Rattan reported that relaxation of the lower sphincter is controlled by vagus nerves that release a chemical called vasoactive intestinal polypeptide (VIP).

Their discovery has aided understanding of much more than the lower esophageal tract. "VIP-containing nerves have been found throughout the body, playing an important role in neural control of smooth muscle in the GI tract, respiratory system, and blood vessels," reports Goyal. These nerves also act on the mucous membranes of the intestine, controlling intestinal secretions; elevated levels of VIP can cause severe diarrhea.

Before their discoveries about VIP, Goyal and Rattan had explored neurochemical transmission from the vagus nerve to the VIP neuron. In 1978 they found, in addition to the nicotinic-sensitive cholinergic receptors already known, two muscarinic-sensitive receptors with contrasting functions. Stimulation of the M1 receptors, located in the inhibitory neurons, causes the sphincter to relax



Charlotte and Irving Rabb

due to the release of VIP; stimulation of the M2 receptors, located on the muscle, causes the sphincter to contract. M1 receptors are primarily involved in gastric acid secretion. Therefore, M1 receptor antagonists are now being used in the treatment of peptic ulcer disease and reflux esophagitis, particularly in Europe. "These agents have advantages over the usual anti-muscarinic agents, such as atropine, in that they do not upset motor function of the gut," comments Goyal.

Goyal and his associates at BIH are now trying to devise an M2 receptor antagonist. M2 receptors are involved in the abnormally increased colonic activity associated with irritable bowel syndrome—characterized by abdominal pain with episodes of diarrhea and constipation. Recently, muscarinic receptor subtypes have been found throughout the body, including the brain, cardiovascular system, and the rest of the gastrointestinal tract.

Other work in Goyal's laboratory includes studies of how the brain and esophagus work together to produce peristalsis; studies of opioid receptors in the sphincter; and study of an abnormal epithelium that may replace the lining of the esophagus when acid backs up from the stomach, and which sometimes develops into cancer.

Irving Rabb is still a trustee of BIH—as his brother, father, and uncle have been—and of the Dana-Farber Cancer Institute. He is also a board member of Harvard Community Health Plan, which he helped found, and a former member of the Visiting Committee of HMS and Harvard School of Dental Medicine. He is retired vice chairman of the board and chairman of the Executive Committee of Stop & Shop.

Charlotte Rabb has also been a trustee of BIH. She has worked as a remedial reading teacher for dyslexic children in the adolescent unit of Children's Hospital, and was a founding member of the United Cerebral Palsy Association.

Both Rabbs hold Harvard degrees, as do 35 of their relatives. Their son, James '70, is clinical professor of medicine at BIH. Rabb family ties to the hospital date back to 1929, when it opened at its present site. Family gifts have included the Rabb Building and the 15-bed inpatient psychiatric unit. □



Marian Neutra

Colombian Connection

In the South American nation of Colombia, medical education is hampered by lack of money, equipment, and well-trained researchers, and by isolation from the international scientific community. Harvard Medical School has joined with the Association of Colombian Faculties of Medicine (ASCOFAME) to improve the level of basic science research and teaching in Colombian medical schools through collaboration between Colombian and North American scientists.

At ASCOFAME's invitation, in March 1983 Dean Tosteson, Marian Neutra, associate professor of anatomy, and Manfred Karnovsky, White Professor of Biological Chemistry, met in Bogata with government officials and academics from several Colombian institutions. The three of them and members of ASCOFAME developed a tentative plan for cooperation, which the HMS Faculty Council later unanimously approved.

Neutra, who lived and worked in Colombia for three years and is fluent in Spanish, was appointed chair of the HMS Committee on Colombia, which creates and maintains contacts and exchanges between Colombian and North American scientists. In July, she returned to Colombia with four other scientists to present a scientific symposium, simultaneously translated into Spanish, on cell biology, parasitology, neurobiology, molecular biology, and genetics. □

Alzheimer's Disease Research Center Formed

Secretary of Health and Human Services Margaret Heckler came to Harvard Medical School in October to announce that five national Alzheimer's Disease Research Centers will be established by Congress this year, one of them—a consortium of Massachusetts institutions—to be led by HMS and Massachusetts General Hospital. The center—directed by John Growdon, associate professor of neurology and head of the Memory Disorders Unit at MGH—is funded for five years with a grant of nearly \$4 million from the National Institutes on Aging of the National Institutes of Health. David Drachman, professor and chairman of neurology at U. Mass. Medical Center, is co-director.

The government singled out Alzheimer's disease (AD) for special priority. Heckler said at a press conference in the HMS Faculty Room, because the condition is a "terrifying spectre for the elderly," whose numbers are increasing. Characterized by progressive impairments in memory, language, abstract reasoning, and visual perception, AD affects one to two million Americans, including an estimated half of all nursing home patients in this country. Its cause is unknown, and there are no cures.

Conquering AD could considerably reduce patient-care costs, cut the number of nursing home inhabitants by about half, and help "restore the social fabric of victimized families," predicted Growdon at the press conference, adding, "The social disintegration in a family that has an Alzheimer's disease victim is dreadful to see."

The new centers will "enable us to do things we haven't been able to do, and approach questions in a multifaceted manner that will speed up research," said Zaven Khachaturian, NIA program director, after Heckler's announcement. The Massachusetts AD Research Center will coordinate clinical and basic science investigations already being conducted, and will stimulate more. Since there is no animal model, investigators must concentrate on clinical studies and examination of brain tissue after death. Research at the center will fall into four broad categories: abnormal proteins that accumulate in the brains of AD patients, possible genetic markers

or familial traits, anatomical and neurotransmitter abnormalities, and behavior and neuropharmacology.

Patients will be enrolled into the center from existing clinical units at MGH, U. Mass. Medical Center, and Beth Israel Hospital. Clinical data from these units will contribute to the center's patient registry at MIT, and all materials will be sent to a Tissue Resource Center to be established at MGH. HMS's Division on Aging will disseminate information and develop training programs for the professional and lay communities.

HMS faculty affiliated with the new center include James Gusella, assistant professor of genetics; E. Tessa Hedley-Whyte, associate professor of pathology; Dennis Landis '71, assistant professor of neurology; Charles



John Growdon and Margaret Heckler, at press conference to announce new center

Marotta, associate professor of neurosciences; Joseph Martin, Dorn Professor of Neurology; Marek-Marsel Mesulam '72, associate professor of neurology; Ralph Nixon, assistant professor of psychiatry; E. Peirson Richardson '43A, Bullard Professor of Neuropathology; John Rowe, associate professor of medicine and chairman of the Division on Aging; Henry Royal, assistant professor of radiology; and Dennis Selkoe, associate professor of neurology.

The four other centers are at Johns Hopkins Medical School, University of Southern California, UC-San Diego, and Mount Sinai Medical Center in New York City. □

ALUMNI COUNCIL

Summer Meeting

Much discussion was sparked at the spring Alumni Council meeting by the Alumni Survey Committee Report on the Selection and Performance of Harvard Medical School Graduates in Residency Training Programs.

The report, printed elsewhere in this issue, is based on ratings of 367 recent HMS graduates by residency program directors across the country, who evaluated each graduate in eight categories. Council discussion focused on two themes: how to improve assessment of HMS students, and the importance of continuing evaluation of residents. Council members suggested that surveying program directors about recent graduates become an ongoing process, so that responses can be compared with letters of recommendation and comments by the faculty. The council voted to pursue the subject with a systematic study.

The results of the Council's election for members were announced; the *Bulletin* masthead contains a full list. See the Fall 1984 issue for addresses.

Fall Meeting

Finances were first on the agenda of the fall meeting. Daniel Federman '53, dean for students and alumni, presented an overview of the school budget, reviewing expenses and sources of income.

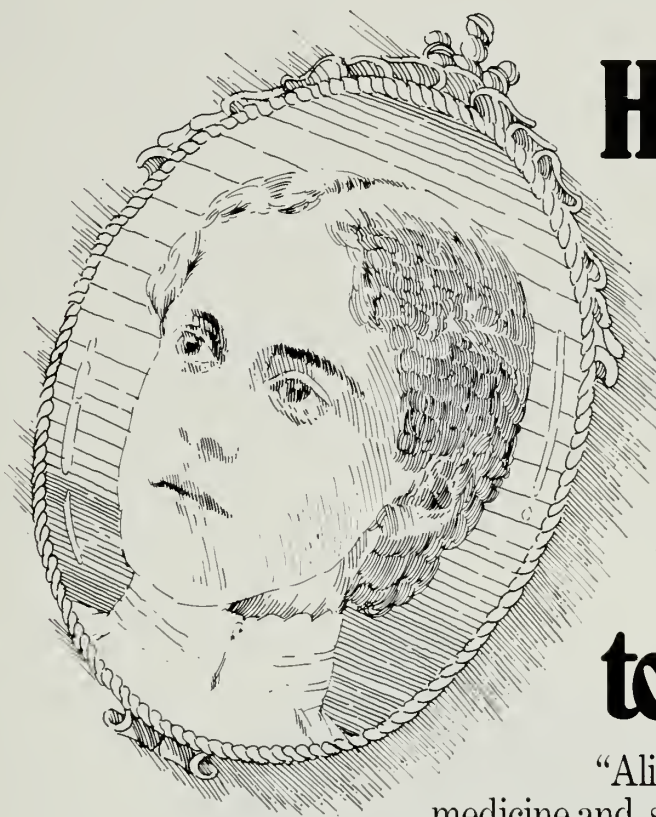
William Stone, new dean for resources (interviewed in the Winter *Bulletin*), was then introduced to the council. He is now organizing a major capital campaign—to be officially announced in January 1986—and a continuing program for giving to HMS.

Stone showed the council an organizational chart of key Alumni Fund and Development Office staff. Those most directly concerned with alumni are Joseph Murray '43B, acting chair of the Alumni Fund; Dorothy Newell, director of alumni gifts, who works closely with Murray; Perry Culver, who has become involved in alumni giving since his abdication of his responsibilities with the Alumni Association; and John Shugert, director of alumni development, who is in charge of major donations from alumni. Other development activities include deferred giving programs, and soliciting of donations from corporations, foundations, or friends of the school. Alumni can help by identifying possible donors and referring Development Office staff to them.

Stone also plans to launch a quarterly newsletter named *Perspectives*, devoted partly to reporting current research and events at HMS, and partly to the resources campaign. It will be sent to a large mailing list, including alumni.

Robert Lawrence '64 was appointed as chair of the Alumni Survey Committee, and, after much discussion, was charged with conducting a study of alumni attitudes toward the school.

Finally, Will Cochran '52, newly installed director of Alumni Relations, reported on his meetings with pentad reunion committees for 1985. He then mentioned a review he had undertaken of all the council minutes since 1952, and shared with the council a poster inscribed with the saying: "After all is said and done there is a lot more said than done." □



How a sheltered girl became the mother of industrial toxicology.

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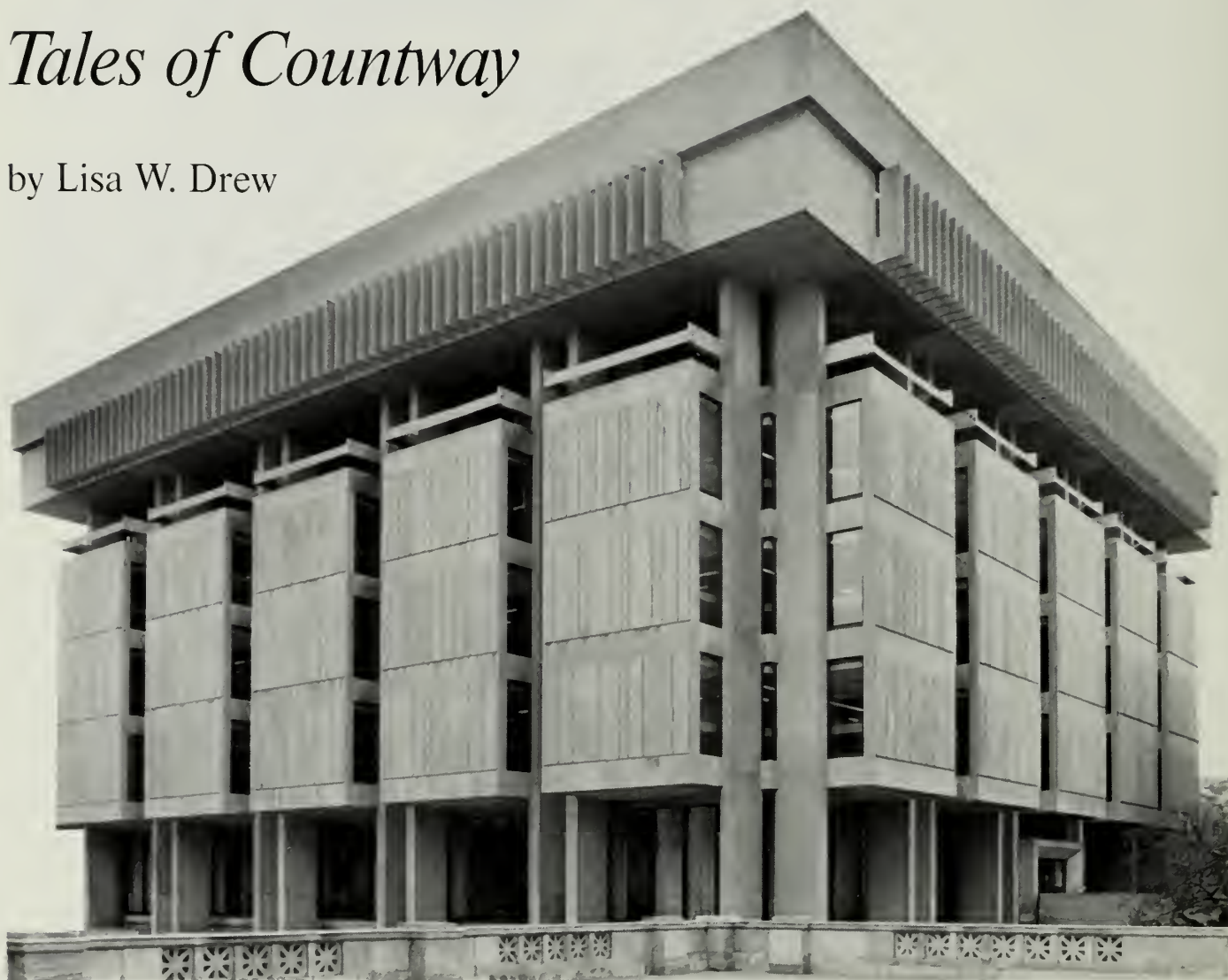
A Life in Letters

Barbara Sicherman

The Library that Soap Built

Tales of Countway

by Lisa W. Drew



GEORGE PACKER BERRY had probably had a long day that fateful evening sometime after the 1955 death of soap tycoon Francis A. Countway when, legend persistently has it (passed on by many, verified by none), a chauffeur casually pointed him in the direction of the Countway fortune.

Since Berry had become dean of Harvard Medical School in 1949, he had been tirelessly working to realize his dream of the medical school of the future—a school with a great library at its heart. He wanted to create a single library that would serve the entire medical community. He hoped to see under one roof the collections of the Boston Medical and Harvard Medical libraries, an idea that had been met more than once by successful resistance. And although he had a reputation as a great fund raiser (“when he put his arm around you, you were trapped,” recalls Rare Books curator Richard Wolfe), he faced a formidable task in finding donors who would share his vision, who could see the advantage of a library that served more than just the university.

The HMS library (started soon after the establishment of medical professorships in 1782, with plans to become “a collection more perfect than any in America, as soon as circumstances will permit”) was then located on the second floor of Building A. Despite the charm of the approach up the marble stairs, the high ceilings, a fireplace in the reading room, and large solid reading tables surrounded by Windsor chairs—and despite the conversion in 1928 of a student lounge and an amphitheater (now the Registrar’s Office) into additional space—the library’s inadequacies, according to Berry, “had passed the stage of inconvenience.” There were fewer than 150,000 volumes—10,000 of which were farmed out to departmental libraries in remote buildings, with restricted hours—and 1,200 subscriptions. For further resources, medical students trekked over to Boston Medical Library (BML), on The Fenway.

As Berry parked his DeSoto (some say Chrysler) that evening in the garage of the residential Longwood Towers in Brookline, the story goes, he found himself approached by Frank Collins, chauffeur to Gussanda

(Sanda) Countway.

“I think you might just be the one,” Collins reportedly said to Berry, “to help Miss Countway solve her problem.”

“What problem?” Berry asked.

“Deciding how to spend her money,” said Collins.

It was a propitious suggestion. By 1960, Berry was able to write the members of the Visiting Committee that the school was ready to “move forward in the creation, not just of one of the nation’s largest depositories of medical books and periodicals, but of a service that will superbly meet the needs of the modern scientist, the teacher, the student and the medical practitioner.” Legend aside, it was a move made possible, Berry recently emphasized to the *Bulletin*, by the efforts of the late General Robert Cutler, whose key role is detailed below.

Twenty years old this June, the Francis A. Countway Library of Medicine—operated under a unique dual corporate ownership of the Harvard Medical and Boston Medical libraries—is second only to the National Medical Library at Bethesda, and is the largest university-centered medical library in the world. The combined collections, on open shelves with the exception of rare books, total roughly 515,000 volumes and 5,000 current periodicals. The library can hold up

to 750,000 volumes. Last year just under one million citations to the biomedical literature were retrieved for users, and 2,000 literature and database computer searches were performed.

The building itself, according to architect Hugh Stubbins, who had previously designed Harvard’s Loeb Drama Center, is “nothing less than a monumental structure on a restricted site.” In 1966, the American Institute of Architects, in cooperation with the American Library Association and the National Book Committee, honored Countway Library and Hugh Stubbins Associates with the Award of Merit, “in recognition of distinguished accomplishment in Library architecture.” Stubbins will be guest of honor at the library’s anniversary celebration this June.

MISS COUNTWAY’S MONEY was largely an inheritance from her brother Francis, once the second-highest-paid business executive in this country (after film mogul Louis B. Mayer). The reclusive Sanda had left a teaching career to devote herself to Francis after their father’s death in 1911, and had kept house for him at Longwood Towers until his death at age 79 in 1955.

Francis Countway had made his



Francis Countway in 1912, when he became general manager of Lever Brothers, courtesy of Lever Brothers



Only known photograph of Sanda Countway: from 1904 Tufts yearbook, courtesy of Tufts University

way up the corporate ladder in American-dream fashion. After quitting high school at the age of 16, he became a bookkeeper for a molasses dealer who had an interest in the soap firm Curtis, Davis & Co. At 21, he switched from molasses to soap, and from bookkeeping to sales. Then English soap maker William Lever acquired the small company, and Countway soon caught the attention of Lever himself: by scheduling his visits around his clients' hours, young Francis was making three times the sales calls of anyone else in the company.

Countway's rise within Lever Brothers Company was meteoric. By 1912, at the age of 36, he was general manager. In 1918 he became president of the U.S. branch. He was "no

less adept at selling himself than at selling soap," according to a 1940 *Fortune* magazine article, which offered as evidence the following anecdote, ironic in view of the eventual destination of the Countway fortune:

... some idea of his assiduousness can be gained from the masterful gesture he made in 1918 when Lever began a quixotic experiment with fisheries in the Hebrides. Countway learned that the founder was interested in commercial fisheries, and he put a clerk to work assembling a library on the subject. Several months later Lever visited the U.S., and by that time Countway had not only made himself an authority on fishing but had assembled a five-foot shelf of the world's greatest fishing literature. So he was able, very casually, to remark to Lever that 'just lately' he had started to do a 'little reading' about fishing and that he'd be glad to give Lever the books he'd 'picked up.' The effect justified the effort.

Countway's managerial style, according to *Fortune*, was "distinguished by a capacity for demanding the impossible and for not being a bit surprised when it is accomplished." His appearance had a "late Renaissance quality," with "a small idiosyncrasy in the matter of cuffs. He elects cuffs with a band of braid about an inch above the buttons, and a half dozen or so of his officers have developed the same preference."

In addition to his penchant for elegant dress, Countway used his prosperity to take up golf, purchase a Dusenbergs car, and vacation with Sanda at their summer home on Cape Cod. He reportedly used some of his wealth to help underprivileged boys obtain educations. He served on advisory committees of Boys Clubs of Boston and Cambridge Hospital, and was photographed lunching with Joseph Kennedy at a meeting of the



George Packer Berry

■ ■ ■

This is a building built: not poured, assembled, conjured; nor a victim of the budget. . . . Six square stories rising over levels one and two enclose the central hall straight to the roof, all angles blent and softened below timber line by what is rare in style since Bulfinch—wide elliptic self-supporting double stairwell, banistered with graceful outsize boomerangs; an accent cunningly designed to keep three floors thrice welcome in one glance. Look above you with surprise, and there (both south and north) the architect has ranged two outward-jutting choirs of five carrels— or single studies—ten to a floor at levels five and six. They cling in glass and limestone like twin banks of nests, the kind the neat cliff swallows model under inviting eaves.

— poet and historian David McCord, from *Bibliotheca Medica: Physician for Tomorrow*, 1966



General Robert Cutler and Frank Collins (chanfrenn to Sanda Countway) at 1964 laying of library cornerstone, courtesy of Rare Books, Countway Library

Northeast Newspapers Advertisers Bureau.

Under Countway, Lever Brothers developed new products, with advertising slogans that have imprinted themselves on the American consciousness. After a game of golf, Countway came up with the initials B.O. for body odor, which were used with spectacular success in radio advertising campaigns (with the "B.O." long and low as a foghorn) to sell Lifebuoy Soap. For Lux Toilet Soap, Lever Brothers staged a contest to choose the scent from among 40 contending fragrances, and signed up Hollywood stars for testimonials: "Nine out of ten screen stars use Lux."

Unlike Francis, Sanda Countway completed high school and went on to Jackson College at Tufts University, where she was called "Gussie," managed the basketball team, was on the All Around Club dramatic committee, and prepared to be a teacher.

In 1965, days before the opening of Countway Library, *The Chelsea Record* printed an interview with Sister Mary Rosa, née Ruth Doyle, who had taken Latin from Sanda Countway at Chelsea High School:

Miss Countway was a powerhouse of knowledge. She brought to her Latin class each day new ideas on Caesar's Gallic Wars, her animation making the text a living topic. The blackboard was covered with her handwriting as she scanned for us line after line of Vergil's *Aeneid*. . . . A truly beautiful person, she had a cameo face, slightly olive in complexion, high cheekbones with a touch of pink. The eyes were a liquid brown. Her hair was chestnut, framing her face and brushed over the 'rat' foundation women wore in those days. Hers was a spritlike figure, small and energetic, moving at all times, never allowing boredom. She drove a Ford two seater each day from Somerville in those days when cars were rare and a woman at the wheel even more so. The Ford was parked outside of Chelsea High School on Crescent Avenue, where the clip-clop of horses' hoofs reminded us that the century was still young. . . . She used to present us with a little gift of bookmarks for the notes at the end of our *Aeneid* and Cicero, artistic little articles with a silken tassel. It showed her desire to give in those drab days when no one gave anything to anyone. . . . After my graduation from Chelsea High School in 1913, I lost all contact with Miss Countway, but retained a most vivid memory of her through the years. Like her brother, she had his potentialities, but in the limited confines of a four-walled schoolroom.



Under Francis Countway, Lever Brothers' advertisements became part of the American consciousness

HOWEVER THE COUNTway fortune came to the attention of George Packer Berry, the key figure in soliciting funds from Sanda Countway was General Robert (Bobby) Cutler. The brother of Elliott Carr Cutler, former surgeon-in-chief of Peter Bent Brigham Hospital (PBBH), Bobby Cutler had long been a friend of HMS. In his capacity as president of Old Colony Trust Company, Cutler had been admired by Francis Countway—and the company had been named co-trustee, along with Sanda Countway, of Francis's estate. As Sanda wrote to Cutler in 1956, "There seemed to exist between you and my brother a major mutual regard."

Cutler was also honorary chairman of the Board of Trustees of PBBH (on which he had served as treasurer and president). As Lawrence O. Pratt, manager of the Program for Harvard Medicine, wrote in a 1966 *HMAB* article, "some measure of the devoted service of General Cutler can be gained from the single proviso he attached to his acceptance of President Eisenhower's invitation to direct the Inter-American Bank: He must be free to continue his work for the Harvard Medical Center Fund."

In a private communication to Berry, Cutler described Sanda Countway as "a woman of force, clarity of mind, and executive decision," and "irretrievably committed to making this suitable gift in memory of her brother."

The correspondence in Berry's files (on deposit in Rare Books) reveals that, as negotiations progressed, Sanda entertained Cutler and Berry at her home (Berry wrote her that he "greatly enjoyed my visits at Longwood Towers, including cold lobster, tempting sandwiches, chocolate wafers, and excellent [S]cotch"), and was wont to send them off with bags of macaroons; that she had retained her love of words and language from her teaching days (from a letter to Berry: "I came upon a new word the other day, — Syntopica — (An Index of Ideas). I'm sure your brochure would qualify."); that she relied greatly upon her chauffeur, whom Berry referred to in a letter to her as "faithful Collins"; and that she took great pleasure in the plans for the library and the community's reaction ("I liked Dr. Beecher's 'triumphant meeting' and 'extraordinary achievement'—and Dr. Lee's 'a masterful stroke'—with the hint of its invaluability to posterity.



These books were very dear to me as they stood upon my shelves. A twig from some one of my nerves (as I remember saying long ago) ran to every one of them. From the time when I first opened Bell's Anatomy to that in which I closed my Sharpey and Quain and my Braithwaite's Retrospect, they marked the progress of my studies, and stood before me as the stepping-stones of my professional life. I am pleased that they can be kept together, at least for the present; and if any of them can be to others what many of them have been to me, I am glad to part with them, even though it costs me a little heartache to take leave of such old and beloved companions.

— Oliver Wendell Holmes, 1888, on the occasion of donating his book collection to Boston Medical Library

President Emeritus Phippen [of Boston Medical Library] contributed 'history making venture'—and the '2nd largest medical Library in the country.' All of these I applaud. . . . [C]onstantly permeating my mind is the satisfaction that the memorial is taking shape before my brother's name is completely forgotten.")

With Cutler's help, Sanda set up the Countway Charitable Foundation, which gave \$3.5 million for the library, and also benefited the Museum of Science and Boys Clubs of Boston. The library gift served as a catalyst for others. Harold S. Vanderbilt, whose generosity in 1956 had resulted in HMS's Vanderbilt Hall, launched the library endowment fund with \$1.5 million. The John and Mary R. Markle Foundation gave \$200,000, a milestone



The site almost dictated a vertical disposition of the elements. This is not the usual plan for a library since it is traditional to place as much of the reader facilities, reference indices, latest acquisitions, and current periodicals—as well as the administrative offices—on the entrance floor. . . . The building became a square, and the plan by this simple monumental form permitted us to fulfill the program requirements in a nearly ideal way. The circulation of people to and from each floor occurs on the edges of the central open court. In a ring surrounding the court are found the facilities: book stacks, open and easily accessible. On the outer periphery are the reader alcoves, varying and flexible and insulated by the stacks from the distracting movement of people.

— Architect Hugh Stubbins, from *Bibliotheca Medica: Physician for Tomorrow* 1966



Harvard Medical Library on second floor of Building A, 1958, courtesy of Rare Books, Countway Library

in foundation giving, with "a significance far out of proportion to the size of the gift," according to Pratt in his *HMAB* piece, who pointed out that "most of the health-oriented foundations gave as a matter of policy only for current use, shying away from gifts to capital campaigns." The Markle example was followed by \$1.5 million from the Rockefeller Foundation, and substantial amounts from the Commonwealth Fund, the Susan P. Baker Trust, the Avalon Foundation, the James Foundation, and the Ford Motor Company Fund.

Sanda Countway never saw the Francis A. Countway Library of Medicine. She died in March 1963, and was buried next to Francis in Mt. Auburn Cemetery. She left \$50,000 to Frank Collins, her chauffeur.

BOSTON MEDICAL Library started in 1875, as a private physicians' collection in an unassuming two rooms at 5 Hamilton Place, with Oliver Wendell Holmes as its president. A full history can be found in Joseph Garland's *The Centennial History of the Boston Medical Library*, published by The Trustees of the Boston Medical Library. The prime mover was young gynecologist James Read Chadwick,

who convinced the Medical Observation Society of the need "among the members of the Medical Profession in this vicinity, of an opportunity to consult, at will, the Standard Medical Works and the files of the current Medical Periodicals."

Chadwick tirelessly scoured Boston for additions to the collection, and at the library's first anniversary, according to Garland, he added up "the booty: 2639 volumes of American and foreign journals, 1445 books in the general library, 404 in the obstetrical section, 3000 pamphlets, 120 journals received regularly. . . ."

Only three years after it opened, the library moved to more spacious quarters at 19 Boylston Place. By the time it moved again in 1901, to a new building at 8 The Fenway, it had, according to Garland, "swelled to amorphous proportions by the overflow of books and portraits which gathered dust, unread and unadmired, in the storage rooms of Harvard Medical School and the Museum of Fine Arts, Dr. H.P. Bowditch's barn in Jamaica Plain, and even the Forest Hills crematory." Along the way to its eventual destination within Countway Library, BML acquired the fellows of Massachusetts Medical Society as paying members, and established a

close relationship with the *New England Journal of Medicine* and the *Journal of Bone and Joint Surgery*.

The courtship between the HMS and Boston Medical libraries formally began after the BML trustees examined copies of Berry's "Building Program" for the Francis A. Countway Library of Medicine in the fall of 1958, and debated their own financially insecure future. A BML contingent led by president Howard Sprague met with Sidney Burwell, chairman of the HMS Library Committee and former HMS dean, and newly recruited HMS librarian Ralph Esterquest, to propose a "marriage" of the two libraries.

Negotiations took just over a year, resulting in a "Letter of Agreement." As current Countway librarian Robin LeSueur puts it, "BML made its dowry available to Harvard, and Harvard provided the house for the marriage partners to live in." Within that house BML required space for a trustees' room, offices, a reading room, and a home for the editorial offices of the *New England Journal of Medicine* and the *Journal of Bone and Joint Surgery*.

IN 1964, WITH CONSTRUCTION well underway, just before Berry stepped down as dean, Countway Library was celebrated with the laying of a dated cornerstone (reported in Summer 1964 *HMAB*). A distinguished assemblage—including General Robert Cutler and Frank Collins, seated together in the second row—watched from wooden seats as librarian Ralph Esterquest deposited a sealed box behind the cornerstone; 10 honored guests, including Dean Berry, applied mortar after the stone was put in



First Countway librarian Ralph Esterquest confronting the riches in the basement of Boston Medical Library at 8 The Fenway, courtesy of Rare Books, Countway Library



Countway interior

place; and speeches were made. The box had been filled with, among other items, a piece of brick from the old BML building at 8 The Fenway, histories of the two libraries and other Boston medical libraries, photographs, pamphlets, news stories, and bookplate collections.

"It took three moving vans, moving in a continuous circle between Boston Medical Library and Countway, eight months to move the BML collection," recalls one librarian. Thirty-five tons of BML material had been, according to Garland's history, "weeded out and shipped off for recycling in preparation for the move." There remained, of the cataloged collection alone, "97,267 monographs (mostly books), 129,665 volumes of periodicals, and 7,121 volumes of dissertations, which together with miscellaneous categories made a total of 245,643 volumes." Harvard Medical Library "contributed 69,691 monographs, 79,849 serials, and 5,238 volumes of dissertations, adding up with its odd books to 166,514."

The opening of the library was celebrated one year after the laying of the cornerstone (later covered extensively in David McCord's *Bibliotheca Medica: Physician for Tomorrow*, published by Harvard Medical School, and also reported in Summer 1965 *HMAB*). There were two days of symposia on "The Significance of Medical History" and "The Challenge

of the New Technology," and dedicatory ceremonies that included a keynote address by Archibald MacLeish, Boylston Professor of Rhetoric and Oratory emeritus.

OVER THE PAST 20 YEARS there have been a few changes at Countway. There has been some attrition of librarians; now in charge is Canadian Robin LeSueur, working with the special assistance of Charles Colby, associate librarian for BML services. (Colby has been with BML since before the move to Countway.) The largest innovation has come with the advent of the electronic age. The library can plug into an astonishing array of databases, and offers a variety of search services. It promises to be an important resource for HMS's New Pathway Project in General Medical Education, which will rely heavily on information technology.

Some things never change, however. Within the bursting rare books stacks on the fourth and sixth floors (accessible only through Oliver Wendell Holmes Hall on the fifth floor) is a rising tide of extraordinary historical treasures, presided over by curator Richard J. Wolfe, Joseph Garland Librarian. The sorting and cataloging started over two decades ago, with a several-months-long effort to organize the BML rare books before the move to Countway. Workers with heads "swimming in disbelief at the quantity and quality of books and manuscripts that have accumulated and remained uncatalogued and unknown over nearly half a century," recorded "discovering" in a single day "an incunabulum, two 1896/1897 x-ray items (one of them the first Russian publication on the subject), some unpublished letters of Oliver Wendell Holmes, and three of Jacob Bigelow's account books noting the sales of his great *American Medical Botany*."

Says Wolfe, surveying a corridor of over 1,000 books published before 1500—on the way to giving this writer a tour of a dizzying array of bound notes, anatomy atlases, priceless first editions, texts with telescoping overlay illustrations, 18th-century engravings, a bust of Hippocrates, half a million uncatalogued French and German theses from the 18th century on, all of which Wolfe seems to have registered in his own memory—"There's just so damn much of the stuff."

A Tour of the Fourth Floor

IF YOU TAKE THE ELEVATOR to the fourth floor of Countway Library, and are brave enough to pass through doors guarded by a large red alarm and a sign reading "RESTRICTED AREA. NOT OPEN TO GENERAL PUBLIC," you'll discover a quiet, industrious world, a little-known center of scholarship. From offices on this floor come definitive histories and biographies; studies of health policy, nutrition, and alcoholism; and much more.

The library was designed as a square built around a central open space. The third and fourth floors have small individual study carrels facing the open center, stacks filling most of the floor space, and glassed-in alcoves around the perimeter, originally meant to be assigned temporarily to people working on special projects.

Almost as soon as the library was built, librarians discovered that Boston Medical Library had contained many more rare books than anyone had realized. With Harvard Medical Library's rare books and the additional material that later poured in from gifts and bequests, the combined collection soon overflowed its allotted stack space on the sixth floor. Books and papers were moved downstairs to fill a good proportion of the stacks on the fourth floor, and a metal caging was built to enclose them.

Since the caging also enclosed a

number of alcoves, Rare Books took them over as well. Richard J. Wolfe, Joseph Garland Librarian and curator of rare books and manuscripts, assigns these offices to "people whose work is related to the stuff we do here: history and collecting archival material."

The offices outside "the cage," as the grating has come to be called, are assigned by S. James Adelstein '53, dean for academic programs.

THE OFFICES OUTSIDE THE cage—Emeriti Row, as one staff member calls it—are accessible from the elevator. At one end of the corridor is **Hermann Lisco**, former associate dean for student affairs, and associate professor of anatomy. Since his retirement in 1982, Lisco has continued his research and writing on the worldwide epidemiology of cancer, particularly that associated with exposure to radiation. He is involved in an international study to evaluate the late effects of radiation exposure in cervical cancer patients, with particular emphasis on the occurrence of second primary cancers in a cohort of approximately 54,000 patients from European and U.S. clinics. The study is sponsored jointly by the National Cancer Institute and the International Agency for Research on Cancer.

The next office is shared by two medical historians, **Allan Brandt**, assistant professor of the history of medicine in the Department of Social Medicine and Health Policy, and **Harry Marks**, instructor in social medicine and health policy. Brandt is working on a social and cultural history of cigarette smoking in America; Marks is writing a book on the history of randomized controlled trials (statistical evaluation of therapeutics) in the U.S.

In the next two offices rounding the corner are **Carl Walter '32** and his administrative assistant, **Virginia Linnane**. Walter moved into the library recently, when he retired as chairman of the Alumni Fund. He is refining a plan for deferred tuition that would simultaneously finance education and build a gift to HMS at the 30th reunion of each class.

"As the months pass, ready access to the unparalleled resources of the Countway has proven irresistible," Walter wrote recently. "Repeated consultations about infection control have

forced me to document opinions by a search of the current literature. The result has been a growing conviction of the need to update my book *Aseptic Treatment of Wounds*. The scientific facts have not changed, but the jargon of the day demands interpretation and incorporation. Expediency, rather than asepsis, still dominates infection control."

Next along the corridor is the office of the Committee on Educational Evaluation. There staff assistant **Alane Shanks** puts together peer course reviews and student evaluations of pre-clinical courses, ICM, and required clerkships.

The next two offices are occupied by **Francis D. Moore '39** and his administrative secretary, **Susan M. Lang**, Moseley Professor of Surgery emeritus and former head of the Surgical Department of Peter Bent Brigham Hospital. Moore considers his Countway office "the best thing that's happened to me since I retired in 1976." He still teaches surgery and anatomy at HMS, and is president of the Massachusetts Health Data Consortium, for which he does health policy analysis and health manpower research. He also does health policy analysis for Harvard's Kennedy School of Government, sees patients in consultations, and works with the *New England Journal of Medicine*. His many recent papers include an analysis of high-cost users of medical care, with Christopher J. Zook, and a study of fiscal flow in the total U.S. health-care budget, with Mark Schlesinger of the Kennedy School.

David D. Rutstein '34 came to Countway in the early 1970s, after he retired as head of the Department of Preventive Medicine at Harvard School of Public Health, "to do some thinking and writing, without interruption. This place provided a beautiful haven."

Since then, Rutstein has published two books—*Engineering and Living Systems*, with Murray Eden, and *Blueprint for Medical Care*—and co-authored a number of research articles. In 1978 he and his associate Richard L. Veech '62 wrote an editorial for *NEJM* setting out epidemiological evidence that alcoholism is inherited. After Veech discovered an alternative pathway by which rats can metabolize ethanol, he, Rutstein, and colleagues found that after consuming alcohol, severe alcoholics (but not

non-alcoholics) produce 2,3-butanediol—the same product rats produce through their alternative metabolic pathway. Rutstein and colleagues are now searching for the human metabolic pathway that produces that substance.

Rutstein's other recent accomplishments include devising a new standard for measuring the quality of medical care that takes the form of a set of tables listing unnecessary (that is, preventable or treatable) cases of disease, disability, and death. He has also suggested criteria for measuring the validity of medical expert testimony in courts of law.

Margaret Boorman occupies the next corner office. Assistant to Daniel Federman '53 for the last eight years, she researches material for his writing on endocrinology, both for the endocrine section of *Scientific American Medicine* and elsewhere.

Next door, **Paul Goldhaber**, dean of the School of Dental Medicine, spends evenings and weekends writing on topics such as bone and tissue culturing and the effect of aging on the responses of bones to various factors.

Frederick Stare, professor of nutrition emeritus at HSPH and founder of its Department of Nutrition, and his secretary, **Patricia Morikawa** (who will leave in the fall to attend medical school), tenant the last offices before the cage. Author of the text *Living Nutrition*, now in its fourth edition, Stare is primarily interested in nutrition education. With nutritionist/writer **Virginia Aronson** he has written five books. *Dear Dr. Stare, What Should I Eat?* (an Ann Landers-style book based on mail Stare has received over the years) and *Your Basic Guide to Nutrition* (a question-and-answer-style book) have already been published. Due out this spring are *Rx Executive Diet*, *Food After Fifty* (which includes an interview with the White House chef and an introduction by Reagan's physician), and *Food for Fun and Fitness*. Aronson is also author of *30 Days to Better Nutrition*, and writes a column for *Runner's World*.

ON THE INSIDE OF THE cage, it's like a different world," one outside-the-cage staff member confided recently. And indeed it is. The stacks are filled to

overflowing with old and rare books; cartons of papers yet to be organized into archives are stacked up along the corridors; old photographs lean against the stacks. Old x-ray tubes and plaster molds of early plastic surgery patients—part of the archives—adorn some offices.

Past denizens of these offices have included Henry Knowles Beecher '32 and Mark D. Altshuler '32 (now in a fifth-floor office as executive officer of Boston Medical Library and honorary curator of prints and photographic collections for Countway), who co-authored *Medicine at Harvard: The First 300 Years*; Leona Baumgartner, former health commissioner of New York and former visiting professor of social medicine at HMS, who wrote historical articles; and Dorothy Murphy, who, after retirement as associate director of alumni relations, organized alumni records for the archives.

Two biographies of major medical figures are now in progress inside the cage. **A. Clifford Barger '43A**, Robert Henry Pfeiffer Professor of Physiology, **Elin Wolfe**, associate editor in the Department of Physiology, and **Saul Benison**, professor of the history of medicine at University of Cincinnati, are at work on a biography of Walter B. Cannon '00.

Just down the hall, in an office adjoining an open alcove piled high with boxes of papers, **Oglesby Paul '42**, professor of medicine emeritus and former director of HMS admissions, is writing a biography of Paul Dudley White '11 and creating an archive of White's papers. He expects the book to be published in time for the World Congress of Cardiology in 1986, which will be dedicated to White.

Elsewhere within the cage, **Linda H. Brink**, associate in pathology, is collecting archives on tropical public health, and **David G. Satin '58**, assistant clinical professor of psychiatry, is organizing the papers of Erich Lindemann. **Robert M. Goldwyn '56**, clinical professor of surgery, and **Madeleine Mullin**, curatorial associate, are setting up the National Archives of Plastic Surgery, first established at Countway in 1972. "I enjoy the quiet, almost reclusive way of life here," says Mullin. "It has a medieval feeling to it."

Barbara G. Rosenkrantz, professor of the history of science in the

faculties of Arts and Sciences and Public Health, is working on two books: one on changes in long-term care of the mentally ill, based on hospital records from the 19th century; the other on developments in community and public health that were catalyzed by private foundations between the two world wars.

In an office adorned with old x-ray tubes, photographs of Marie Curie and Walter B. Cannon, and a frieze of Wilhelm Konrad von Roentgen, **Lloyd E. Hawes '37**, professor of radiology at U. Mass. Medical School, is creating a bibliographic survey of the history of roentgenology, with the help of library assistant **Ruth LaPointe**. Their bibliography now contains listings of 3,000 books in eight languages, cataloged in rare-book style, with full title pages, facsimiles, errata—much more information than is found in ordinary library cataloging. The radiology archives include such items as x-rays of the hands of Nicholas and Alexandra, the last czar and czarina of Russia.

Perhaps the most charming office is the cluttered space where restorer-binder **Vera Herman** repairs damaged books. "I won't live long enough or be active long enough to restore all the books that need work," she sighs as she plucks old books from shelves and points out their torn backs, disintegrating leather bindings, and pages come unsewn. With her capable hands and a few pieces of equipment—a small cutter, a sewing frame, and presses—she repairs them, "doctoring them back to health," as she phrases it.

Herman puts fragile old pamphlets into protective jackets or cases, which she covers with handmade marbled paper. "Some of them are absolutely cornflakes: they just crumble if you touch them," she says. "If the paper is gone, all you can do is sandwich each page between thin sheets of silk, which is very expensive."

"Like Humpty-Dumpty, if a book falls apart, you can't do anything about it," she explains. "There's a point of no return, when there is so much damage it just can't be fixed."

Trying to postpone that point, she uses only natural substances—lanolin, vinegar, paste made from cornstarch. Day by day, she keeps these rare books available for future generations of scholars.

—Lisa Derman

REPORTS

from the field

A few months ago, the student members of our editorial board brought to our attention several of their classmates who had had extraordinary experiences in other countries. Paul Farmer '88, looking for work in a clinical setting and a chance to do anthropological fieldwork, used a grant from Duke University to spend a year in Haiti. There, with the help of friends, he volunteered in a clinic, and later set up a communal bakery with a grant from Boston-based Project Bread.

With the help of a grant from HMS's Student Summer Research Center and the Department of Social Medicine and Health Policy, Anne Becker '87 spent this past summer working with physicians in Haiti to research why so many women in Cité Simone do not use available Western medical care when they give birth.

Jody Heymann '88 joined the Peace Corps following her graduation from college in 1982, and worked as a fisheries extension officer in rural Tanzania.

In the accounts that follow, these students share their experience, and discuss the profound doubts they developed about their roles as Western interventionists (as Paul Farmer might term them).

In the succeeding piece, Tomás Aragon and Carolina Reyes, both Class of '87, offer their insights from a trip to Nicaragua this past summer at the invitation of Oscar Flores, dean of the Faculty of Medicine of the National Autonomous University of Nicaragua (UNAN). Partially funded by the HMS Student/Faculty Committee, they attempted to establish an exchange program between UNAN and a Harvard-affiliated teaching hospital—a program that may never get off the ground, due to deteriorating relations between the U.S. and Nicaragua. Their account—which they dedicate to Gustavo Sequiera, assistant dean of UNAN Medical School, recently kidnapped by the *contras*—describes the social, political, and medical realities they encountered.



Participants in a voodoo ritual at Saut d'Eau will remove the strings they have been wearing and tie them to trees, to leave their troubles behind

The Anthropologist Within

by Paul Farmer

In April 1983, when I left the United States to spend a year in Haiti, I had two cardinal concerns. The first—to work in a clinical setting—reflected my broad interests in health and illness, with an eye toward public health issues in the Caribbean and Central America. The second, and more immodest, was to learn as much as possible about life and death in rural Haiti through anthropological fieldwork.

More concerned with meaning than measurement, anthropological fieldwork involves sustained and deep immersion in a community. The acquisition of a new language, in this case Haitian Creole, is only a small part of the process, for the anthropologist seeks to understand indigenous words, expressions, and categories both de-

notatively and connotatively. Illness terms, for example, must be understood within their cultural contexts. Take diarrhea, for example, "Christophe's Revenge" to inconvenienced tourists, but anathema to Haitian mothers. It didn't take long to learn that *dyare* denotes "diarrhea," but what are the cultural connotations the word can carry? Is *dyare* an illness, or the symptom of one? It took me months of interviewing to learn that, for some Haitian mothers, not all "diarrhea" is *dyare*, and that *dyare* as a diagnosis implies a certain etiology, course of illness, specific herbal remedies, and contingency treatment plans if these do not work.

My interest in medicine pre-dates my interest in anthropology. I became hooked on the latter in my

sophomore year at Duke University, when I took a course titled Medical Anthropology. Since then, I have been involved in a number of research projects designed to explore the interaction of biological and social variables in health and illness. I didn't change my mind about applying to medical school, but I did change my major and the way I looked at patients, healers, and illness. I was pleased to learn that, during the past decade, many medical schools have begun offering courses in anthropology and other social sciences relevant to medicine. A few have developed M.D./Ph.D. programs. Feeling that Harvard was the best of these schools, I decided to apply to HMS with plans to matriculate upon my return from Haiti.

Having profited from the insights of several fine professors at Duke, I acquired some of their biases in the process. I might as well confess at the outset that I harbored a mild distrust of government officials (ours and theirs), the international development set, and—above all—expatriate entrepreneurs and religious missionaries. Put another way, my major interests were medical, while my perspectives and biases were unabashedly anthropological. Two years and three trips later, biases have been changed, perspectives altered and informed. Though I am still an avid student of both anthropology and medicine, attempting to juggle allegiance to two mistresses landed me in predicaments that were both unsettling and instructive.

One methodological bias stood me in good stead: I was taught that the origin and significance of certain elements in a society are often to be found in the history of that culture. Thus I knew that the island of Hispaniola, which Haiti now shares with the Dominican Republic, was once home to several tribes of Amerindians who had the hard luck to be "discovered" by Columbus. His account of the peaceable Arawak people and his rapturous description of their island ("*Es una maravilla!*") reads like an obituary; with a lethal combination of imported infectious disease, slavery, and outright slaughter, the Europeans soon decimated the locals. The island changed names and hands a number of times before the western third became decidedly French. By

the time of the French Revolution, "*la Perle des Antilles*," with its production of coffee, rum, cotton, indigo, and over three-fourths of world sugar, provided more revenue than all other French colonies combined. The opulence of Cap Français (now Cap-Haïtien) rivalled even Versailles, but production costs were incalculably more obscene, for the wealth of the colony was based entirely upon slavery.

The bookkeepers of the slave trade—which traced an infernal triangle from Europe to the west coast of Africa to the Caribbean and back to Europe—left chillingly precise records. One has only to compare annual "import" figures with the year-end census to see that slaves didn't last long on Haitian plantations. Even so, by 1791, the demographics spelled trouble for the plantation owners: approximately 500,000 slaves in the service of 28,000 whites and 40,000 or so "mulatto freed men." Isolated slave revolts gathered steam and coherence, culminating in the revolution which routed Napoleon's select forces in 1804. The world's first black republic was born.

Decades of utter isolation followed. The ex-slaves found themselves stranded in a mountainous country, its arable parts carved into the enormous estates that had fueled the frenzied export economy. European colonial powers would have nothing to do with Haiti. The southern half of the only other sovereign state in the New World was also dependent upon a plantation economy in which slavery played the major role. Southern U.S. senators, especially, warned that the stakes were too high: in order to prevent dangerous notions of "liberté, égalité, fraternité" from reaching its own slaves, the United States must not recognize the Republic of Haiti. It was not until its post-bellum expansion that the U.S. began to exert its heavyhanded "influence" in the region. In part because of the lack of a market for non-food exports, and perhaps as a negative reflex to plantation-style slavery, most of Haiti was parcelled into small plots, a pattern markedly different from the rest of the Caribbean and Latin America.

All these factors contributed to making Haiti what it is today: predominantly agrarian, rural, and poor. Approximately six million Haitians are crowded into a small, rocky, and

mountainous country—ruled, since 1957, by the Duvalier family. By the criteria of the international development set, Haiti is among the world's "least developed" countries, the poorest in our hemisphere. Culturally, linguistically, historically, it must surely rank among the most fascinating.

My interests lay chiefly with the Creole-speaking rural peasants who are still the majority of Haitians. (Anthropologists employ the term "peasant" to designate rural cultivators who produce much of their own subsistence and whose surpluses are transferred to some larger economic system.) Though poor, many Haitian peasants own their land. Most are fiercely independent. That Haiti is

Creole, doing volunteer work, and looking for the right rural community in which to indulge, full-time, my interests in medicine and anthropology. I eventually set my sights on a one-doctor clinic in Mirebalais, a small town in the rural Plateau Central. The clinic was administered by Fritz Lafontant, an Episcopal priest who has helped build a number of schools in areas that had never had them before. With his wife, Yolande, he has galvanized the formation of community councils and women's groups, started adult literacy campaigns, made it possible for especially bright children to pursue educations, and encouraged students to return to help improve their home villages.

Lafontant and his *équipe solide*



Père and Madame Lafontant

properly neither "Third World" (whatever that is) nor "non-Western" was made clear to me one day in a tiny village which I reached via successive use of jeep, donkey, dugout, and feet. No road, no electricity, no water. Here, as elsewhere in Haiti, dress was as Western as in Port-au-Prince, and I distinctly heard Michael Jackson's broadcast voice piping something about a Pretty, Young Thing.

Thanks to friends in Haiti and a small grant from Duke, I was able to spend over a month working on my

(a close-knit team) welcomed me into their community and housed me with two older women, who looked me over, decided I was OK, and proceeded to spoil me rotten. I will never forget the generosity and tolerance of these people, who pretended not to mind my incessant barrage of often inappropriate questions. With the help of new friends in Mirebalais, I began the long task of supplementing and correcting my imperfect knowledge of Haitian history and culture, and filled notebooks with proverbs, ex-

pressions, and songs. I began to feel as if I was finally in the "observer" mode which is the essence of field-work.

How are economic, political, and cultural history relevant to questions of health and illness? Take diarrhea again. In 1979, the Bureau of Nutrition estimated that preschool children were sick half of the time, and that 80 percent of that illness was diarrhea. When I began to work in the clinic, I didn't need sophisticated epidemiological skills to see that "diarrheal disease" was the chief cause of infant mortality. The doctor with whom I worked told me that diarrhea was often caused by bacteria in the infant formula.

I spent a good deal of time interviewing mothers in our catchment area about infant feeding practices. For many of my informants, long-term breast-feeding was impossible, as they were providers of the family's cash income. After the revolution, 19th-century Haitian men knew that if they were too visible they'd be pressed into military service. So marketing became the job of young to middle-aged (40, in Haiti) women; in many areas, it preempts their involvement in gardening and household tasks. In a contemporary study of one rural area, over 80 percent of the women under 50 were "bean sellers," and many of them were away from home for up to six months of the year. The economic reality of most rural Haitian families dictates that time out from work for breast-feeding be minimized.

I spent several months working in the clinic. Four mornings a week, I shared a pot of potent Haitian coffee with Dr. Jean Dieuve. We then walked (or waded, depending on the season) down the *Grande Rue* to the small cement-block building. Invariably, a crowd would have formed in the waiting room, already opened by Ti Nana Joseph, the young woman who registered patients and worked the "pharmacy." My duties included taking vital signs, bringing urgent cases to Dieuve's immediate attention, assisting Ti Nana in filling prescriptions, administering vaccines, and helping to keep records. During the rare visits from American doctors, I served as translator and "culture broker."

Our lone doctor saw up to 180 patients each day. This pace left little time for deepening my understanding of individual illness experiences,

but it certainly taught me a lot about the stark realities of practicing medicine in an underserved area, with no laboratory and few supplies. I saw diseases I will only read about in medical school, and began to understand highly reticulated interrelations among disease, nutritional status, socioeconomic factors, and health and illness beliefs and practices.

On non-clinic days, I went to Port-au-Prince or joined Père Lafontant in Cange, a village in the hills surrounding the Peligre reservoir. Cange had been situated in the flooded valley below until its residents were resettled when a hydroelectric dam was built to provide power for the capital. The villagers received no water, electricity, or remuneration for their land. The stony, treeless slopes are difficult to cultivate, but that is precisely and exclusively what the Cangeois do. When I first visited the village in May 1983, there were no stores, latrines, fountains, or dispensaries. Père Lafontant was building a school, and doing what he called "*motivating*"—which consisted chiefly of touting the benefits of cooperation.

Widespread traditions of independence and self-sufficiency, and a mistrust of any attempt to diminish autonomy, have created cultural barriers

to communal and civic activities. Worsening agricultural conditions and overcrowding now threaten these traditions. Père Lafontant made a convincing case. A community council was organized; it held meetings, identified problems, established priorities. The villagers found that by pooling resources they could begin to implement programs to address some of their problems.

During my stay, I saw enormous transformations take place in Cange. The school, an imposing two-story structure, was completed, as were latrines, teachers' living quarters, a cafeteria, and a community meeting room. Children were afforded their first shot at an education, and some of them walked for hours each day to get it. An adult literacy campaign was started. A project to bring potable spring water up to the village was initiated, and plans for a new clinic were discussed. I had wormed my way into an all-Haitian, grassroots-level development effort spearheaded by the remarkable Père Lafontant. On one torrid August afternoon, I found myself on a hilltop overlooking Cange, a pine seedling in hand. I was preaching to a crowd of 50 schoolchildren about the perils of deforestation and erosion. The anthropologist within must have wondered about so blatantly interventionist a strategy.



Paul Farmer reading Haitian poetry to schoolchildren in Cange

This, then, was my dilemma: was my primary role to be that of observer or intervener? The problem is more than academic, for interventionist strategies in settings like Haiti often call for the extirpation of traditional practices. Planting trees to forestall erosion would not cause too much angst in even the purest of anthropological fieldworkers. But on several later occasions, circumstances forced me to abandon a neutral stance.

One such incident occurred in January 1984. A dozen South Carolinians had come down to Mirebalais to spend a week working with Père Lafontant. On Monday, we commandeered the Cange chapel and held a clinic for area residents. Before beginning, however, we saw a student who had collapsed on the new soccer field while doing exercises. I knew Marie (a pseudonym) quite well: she was 18, and lived with her parents and siblings in a small house just down the road from the school. Though soft-spoken, she was one of Lafontant's "leaders," an integral member of the community.

Marie reported nausea and a splitting headache. Her temperature was normal, her pulse slightly elevated. She denied a recent history of fever or previous syncopal episodes. She was, the doctors decided, anemic, but just what had caused her collapse was unclear. We gave her aspirin, a supply of vitamins, tucked her into the school sickbay, and promised to return during lunch. At noon we found that Marie had declared herself "much better" and walked home. With over a hundred patients left to see, several gravely ill, we soon forgot all about her.

Tuesday found us in the clinic in Mirebalais. Late that afternoon, just after the visiting doctors had walked back to their lodgings, Lafontant pulled up his truck. Marie was in coma; he had brought her and her mother down from Cange.

Dr. Dieuve examined her while Ti Nana went in search of the American doctors. He diagnosed pernicious malaria. With injections of chloroquine, the treatment of choice, he said, her chances of survival were one or two in ten. The other doctors arrived, examined, concurred. Dismayed, I carried her to the house of her great aunt, who lived right next to the clinic, and Dieuve followed

with chloroquine, needles, i.v. solutions. Marie's mother's family was Episcopalian; they stood around the bed, praying and speaking softly as Dieuve set up the i.v. She didn't stir when he inserted the needle. When the mother asked for a prognosis, Dieuve was candid, but remarked that he had seen similarly afflicted patients survive.

The next morning, I accompanied the South Carolinians on their final foray. We crossed the Peligre Reservoir in dugout mango trunks to hold a clinic in a small village on the far side. Halfway across, I asked Madame Lafontant if she had news of Marie's condition. Shaking her head, she told me that Marie's father had arrived in the middle of the night, declared that doctors could not help his daughter, and taken her back to Cange.

Madame Lafontant would say nothing more. Marie's father, I knew, was not Episcopalian. Haiti has its own religion, *vaudou*, born of a remarkable synthesis of Catholicism and animistic beliefs of West African origin. "Voodoo," poorly understood and much maligned by outsiders, is a touchy subject for many Haitians. I suspected that Marie's father had convinced his wife and her kin that his daughter's illness was amenable to treatment by a *houngan*, a voodoo priest. I wished to be broad-minded about the curative aspects of voodoo, but I was skeptical about Marie's chances without chloroquine.

I didn't know what to do. Hadn't Marie's family already made its decision? She was not my kin and this was not my culture. Gliding across the reservoir in a skittish dugout, I felt a severe interventionist episode coming on. When we disembarked, we found Père Lafontant up at the road. He was distressed and angry. He had just confronted the family, and Marie was not going to leave their home. Case closed.

I suggested that one of the doctors and I make another appeal, and off we went to Cange. Marie's father was conspicuously absent; I addressed myself to her mother. Relinquishing all pretension to neutrality, I became a partisan in what I had believed to be someone else's battle. "Our medicines are her only hope; the other way won't help at all." Marie's mother was adamant: "If she's going to die, she'll die here." Marie was on a straw mat on the floor, surrounded by family

members. Her condition, the doctor said, appeared to be no worse than yesterday. "Can we treat her here?" I asked. The mother hesitated, then agreed.

We had no injectable chloroquine, nor did we have the requisite i.v. solutions or sterile needles. Night was falling and soon we would need flashlights. The American doctor, a confirmed but sensitive interventionist, would assist me in collecting the necessities in Mirebalais and we would return to Cange that night. By 9 p.m. a bag of dextrose solution was suspended from a rafter over Marie, and the schoolmaster had agreed to change the bag and administer another chloroquine injection at midnight. I would return in the morning with a second ampule. Père Lafontant had gone to Port-au-Prince with the Americans. I was alone. There was no more injectable chloroquine in the clinic. No one could take me to Cange. Despite the feeling that I had violated some taboo, I persisted, finally purchased some chloroquine, borrowed a car, and convinced Dieuve to go with me to Cange.

Marie recovered. Two days and seven injections after the treatment by flashlight, she regained consciousness. It was not until months later



Madame Capitaine, a friend from the *équipe solide*

that I could comfortably discuss the case with Père Lafontant, who seemed to regard Marie's mother's intransigence as an affront. The event seemed to polarize many of the villagers, though I believe most considered her recovery a victory for medicine. Marie and her mother professed faith in chloroquine, but by then I realized that I was seen as an advocate of biomedicine. Was I also seen as an enemy of voodoo? Other questions loomed large: Would Marie have survived without the chloroquine? Perhaps the *houngan* had effected the cure? What effect did our intervention have on Marie's family? On its members' relation to others in the community? Was our intervention an example of perseverance, or was it paternalism?

At the end of September 1983, I paid for my inconsistency in remembering to take chloroquine. My own case of malaria sent me home and kept me out of circulation for over a month. I had plenty of time to obsess about the observer versus interventionist strategies. I am exaggerating this antithesis, of course: who says that insights from fieldwork can't be applied to practical problems? Indeed, they often are, but the true *craft* of anthropology lies in careful observation, and careful observation can be compromised by the slightest intervention. This "uncertainty principle" makes it difficult to anthropologize and intervene at the same time. Another problem is the *nature* of the intervention, often suspect in the eyes of contemporary anthropologists, whose discipline has a long history of being made the ancilla of Western imperialism.

I felt both stances to be unsatisfactory. In a setting like Haiti, intervening (interfering?) carries an arrogant message: you need my help. The interventionists I met there were often unaware of or unconcerned with the ethical dilemmas posed by steamrolling cultural convention. Many of them seemed to know little about Haitian history and culture. The observer's message is more modest: I have something to learn from you. This stance can lead to an understanding of a culture, but seems impotent in the face of everyday problems of adequate nutrition, clean water, and illness prevention.

This *idée fixe* plagued my conva-



Bakery under construction, spring 1984

lescence, as did memories of my frequently frustrating experience in the clinic. I thought of undernourished babies who were successfully rehydrated, only to die from another case of diarrhea. Nutritional status was all too often the chief determinant of whether a child would succumb to an infectious disease. I then did a very interventionist deed in appealing to a Boston-based charity for funding to support the construction of a small bakery in Cange. Père Lafontant had often spoken of the need for a steady supply of bread, one not dependent on the availability of cash.

With the promised assistance of Project Bread, I returned to Haiti in January. During the spring of 1984, while continuing work in the clinic, I initiated the construction of a community bakery—a fairly complicated affair. The small bakery turned into a large bakery. A month after we laid the foundation, an early rain washed tons of dirt into the construction site. More money was needed to build retaining walls, and Project Bread generously complied. When the walls were up, I left the endeavor in Père Lafontant's capable hands, and returned to the United States.

Almost two years have passed since my first sojourn in Haiti. I've just returned from another visit, seen the completed bakery, and eaten fresh, hot *pain cangeois*. And a recent generous and unexpected gift to fund a nursery in Cange assures my status as troubled interventionist for at least one more trip. My time in Haiti is etched deep in my memory, yet I often feel that my recollections are but disjointed pieces of a puzzle far beyond my comprehension. I hope continued fieldwork will confer the thorough understanding of Haiti I seek.

A more complete knowledge of Haiti and Haitians will also obviate some of the dilemmas I encountered in my first trips. But I'm not sure even the most clever of dialecticians could manage a practical synthesis of the observer and interactionist modes. The tension between the two might be useful, however, and so might anxiety over the effects that a new bakery (or any other major change) might have on what was previously an exclusively agricultural community. Though we may call such projects "progress," they can be profoundly disruptive of a fascinating and unique culture.

Haiti was of immeasurable benefit



Father and son at Saut d'Eau ceremony

to me, but did I *really* do anything for Haiti? The question may sound "neurotic" or defeatist, but I can't help wondering if development projects would be more successful if there were more neurotic anthropologists around to ask such questions. As a

medical student, I face a long career of intervention. If anthropology can foster both understanding and concern for the possible consequences of one's actions, perhaps it should be required reading for medical students. □

A Tale of Two Cités

by Anne Becker

When I arrived in Port-au-Prince last summer, I was enthusiastic about beginning a research project at the Complexe Medico-Social in Cité Simone as soon as possible. Jim Allman, a sociologist involved with the complex, agreed to help construct a study design and questionnaire immediately. Since the next day was Saturday, he suggested

we go to the beach for our brain-storm.

The weather was beautiful. We drove to a Club Med-esque place and put together some ideas for interview topics after a long swim followed by a lobster lunch by the sea. Driving back, Dr. Allman wondered if I'd like to see where I would be working. I nodded an enthusiastic yes.

As we swung onto the main road of Cité Simone, unpaved and lined by open sewers, I choked on the dust pouring through the window before I could roll it shut. The stench of the open sewers seeped in past the closed window and I became overwhelmed with nausea. The juxtaposition of sun and lobster and Haitian poverty was too much for me. I am sure Jim planned the contrast.

We drove in absolute silence. Everywhere I saw barefoot children, some being pulled and scolded by their mothers, some without parents to scold them. Some were half unclothed, some were covered with the white dust they played in. Some of them were crying; some had hands outstretched, begging for money; some were emaciated; some had bellies blown up with edema. I later dreamed about their hungry faces.

Cité Simone is an urban slum just outside Port-au-Prince. It is one of the poorest cities in Haiti, which is the poorest country in the Americas. The health complex is a showcase for U.S. AID because of its success in delivering health care and educational services to a population of 100,000 slum dwellers.

I had spent a summer in Fiji a few years earlier to do research for my undergraduate thesis in social anthropology, and was looking forward to returning to a field situation with the added perspective of a year in medical school. Since I am interested in a career in international health and medical anthropology, the idea of working on a clinically related ethnographic study appealed to me.

My assignment from the Complexe Medico-Social was to investigate why such a high percentage (about 30 percent) of women in Cité Simone chose to deliver their babies in their homes rather than in the hospital, despite the increased risks associated with home delivery. Since the obstetrical services offered to these mothers was affordable (around \$2, no more expensive than home delivery) and accessible (anywhere from 15 minutes to an hour from their homes on foot), the physicians at the health complex suspected that cultural factors might be involved. If so, the same factors might be significant barriers to utilization of the other health-care services offered by the complex.

Nearly all the women I interviewed knew far more than I did about the risks of pregnancy and childbearing, and even those who had had a home delivery believed that the hospital was the safest and best place to have a baby. Moreover, in most cases, those who chose a hospital delivery were able to return home in time to complete traditional postpartum practices: taking herbal baths and vapors, and drinking various teas and purgatives.

Yet some of the women perceived conflict between the maternity ward policies and their own traditional beliefs and practices. They agreed that eating white food after a delivery would probably result in a postpartum vaginal infection and discharge; some of them even gave detailed physiological explanations. But since the hospital staff is hesitant to reinforce behaviors that blatantly contradict

their scientific models and that reflect what they consider ignorance, white foods are served indiscriminately.

A majority of women who had had home deliveries claimed that they had given birth before they had had a chance to leave for the hospital. In some of these deliveries labor was very short, but in most it seemed that the women had either had difficulty judging an appropriate time to interrupt their schedule, or had set priorities on finishing marketing, feeding children, or earning money for food.

I spent the entire summer on my interviews, and the study went well. But when I think about Haiti, I remember the nightmares—the bizarre ones that plagued my sleep at night, and then the daytime ones, the vistas of poverty and desperation that were far more unsettling. Mostly, though, I recall a feeling of profound helplessness.

One day, I went with Reggie Boulos, a physician from the Complexe Medico-Social, to visit a mother in the low-ceilinged, windowless room where she and her six children sleep. The seven of them share a crib, a cot, and the floor. When we arrived, the room was ankle-deep in water. The mother explained that the rain hadn't stopped the night before, so they were unable to bail out the floor. I tried not to gawk, not to let my eyes reflect the misery I saw.

Part of the shock was having been so unaccountably unprepared. I had read the occasional cover story on poverty that appears every so often in national magazines. I had even lived in a bamboo house in a rural village in the South Pacific. Yet this brand of poverty was nothing I had experienced, nothing I had smelled or tasted. I was mute witness to 100,000 Haitians crowded into concrete, wood, and tin structures, and worse. The Kodachromes I brought back were innocuous without the stench of the street, the dust in one's eyes, and the stories of hunger and sickness.

By midsummer, though I enjoyed interviewing the mothers for my study—holding their babies and unraveling their stories and the complexities of their traditions—I became uneasy about my role. The pension I lived in was filled with high-school students and missionary groups who divided their time between duty-free

shops and charity work. I wondered if I was any different from those who came for a few weeks to souvenir hunt, take pictures, preach middle-class values, spread the word of our gods, and touch the poverty of Haitian life in a way that was almost voyeuristic.

When I moved in with an upper-middle-class Haitian family in early July, I was given a downstairs room near the floor where the maid slept. I was told not to mind her; she was only a maid, after all. I watched her over the next several weeks as Madame verbally abused and ridiculed her for laziness. She worked from six in the morning until the household went to bed (she could not tell time), seven days a week, for \$20 a month.

We spent a lot of time together in the evenings, she ironing and washing while I wrote in my journal or read. We didn't say much to each other—indeed we couldn't—but we were both glad for the company. Once she asked if she could hold my pen. She made a few lopsided circles and giggled. She could not read or write. Astonished, I asked how old she was. Fifteen, she replied. She did not look it. "Are you sure?" I asked. "When is your birthday?" She smiled sadly and said she did not know.

Wondering why she stayed, why she put up with Madame, I asked about her family. Her father, she explained, had run off long ago and her mother had sent her to the city to work as a maid. She in turn asked about my family and I told her I had a mother, a father, and three brothers. She brightened, grabbed my hand, and asked if I wouldn't like a little sister. Maybe I could send her some clothes? Teach her some English? Take her back to America with me? She confided that next to going to America, she wanted more than anything else to learn to read and write, but she didn't have the \$30 necessary for entrance fees and a uniform. Maybe I could help her out.

Even more incredible and perverse to me than the conditions and wages under which this young girl worked was the fact that I debated with myself a good long time before giving her the money to go to school. Who knows why I finally decided to give it to her? Maybe I wanted to tell people about it. That episode remains a thorn in my conscience.

One evening, after a long day of

interviewing, I confronted Reggie with my ambivalence. Of what use was I? Of what use would a hundred well-meaning, liberal-minded medical students be? Mothers and their babies in Cité Simone, maids in Port-au-Prince were suffering, and I was asking mothers whether they avoided eating white beans after delivering a baby. Reggie countered that there was a real need to determine why women were avoiding medical care in the complex. With that knowledge and the help of many other health-care workers, he insisted, we can hope

for change: we can provide better health care, watch infant mortality drop, make a difference in some of the lives we touch.

When I left in August, I felt a sense of relief. I was leaving the sewers in Cité Simone, the hostile stares that said, "don't patronize us," the intolerable political climate, the malnourished children—all the nightmares. I wondered if my relief was a good enough reason not to return.

Upon my return to Boston, I sent the maid a box of my old clothes with a letter she won't be able to

read. I doubt she received either. I realized that I would lose touch with her, and I wondered if that were to be my last contact with Haiti.

There is another thorn in my conscience. The handful of people, including me, who spent the summer working in Haiti, learning and caring about the poor in that country, know that it is our lives, not theirs, that are the richer for the experience. The empathy, sadness, and hopefulness I have stored in my memory are vehicles for my growth, not theirs. That alone should be reason to go back. □



We were amazed how close we were able to come to campaigners during election rallies. At center, in uniform, is Daniel Ortega, now president of Nicaragua; to his right is Sergio Ramirez, now vice-president.

Inside Nicaragua

by Tomás Aragon and Carolina Reyes

Last summer we spent two weeks in Nicaragua at the invitation of Oscar Flores, dean of the Faculty of Medicine at the National Autonomous University of Nicaragua (UNAN). We had first met him in April, when he spoke at a weekend-long conference we helped organize, titled "Politics, Policies, and Health

in Third World Communities," sponsored by the National Chicano and Boricua Health Organizations. He told us then, and later confirmed by letter, that we and any other HMS students were welcome to visit Nicaragua as UNAN's guests, both to inform ourselves about health care in Nicaragua and to try to set up an exchange

program between UNAN and one or more Harvard-affiliated teaching hospital. We and our classmate Mark Schuster formed an unofficial HMS student delegation. We stayed with medical students; visited medical schools, clinics, and hospitals; and spoke with peasants and religious workers. In the process we learned about advancements in health and medical education, and about Nicaraguan social and political realities.

Initially, we felt some hesitation visiting Nicaragua at a time when violence and U.S.-Nicaragua tensions were escalating. We arrived just after the *contras* brutally killed two families on the fifth anniversary of the Sandinista revolution that overthrew the U.S.-backed Somoza dictatorship. Earlier that week Western European health workers driving through the Atlantic coast region barely survived an ambush.

Under the charge that Nicaragua is a "Marxist-Leninist totalitarian state" that "exports revolution," the Reagan administration has launched a "covert war" to destabilize and, as President Reagan put it at a recent press conference, "remove" the "present structure" of the Sandinista government. The U.S. has blocked loans and credits to Nicaragua from Western banks. The CIA trains and finances the *contras*, and has also mined Nicaraguan ports.

The *contra* campaign of terror targets teachers, doctors, farm advisers, and public officials. During our visit eight citizens were dragged out of voter registration lines and decapitated in front of their families. In Tipitapa we witnessed a funeral

procession for a local factory worker who, along with seven others, was ambushed and killed by *contra* forces. Since our return to Boston we have learned that four health workers and Gustavo Sequiera, assistant dean of UNAN Medical School, who warmly greeted us upon our arrival, have been kidnapped by the *contras*.

Despite the strained U.S.-Nicaragua relations, we soon lost our sense of personal risk as we traveled freely throughout the country. The many Nicaraguans we met, far from being hostile to Americans, treated us as friends, telling us, "the people of the U.S. are not the same as their government."

The Sandinista government came into power in 1979, when the Sandinista National Liberation Front organized popular resistance and led a mass insurrection which toppled the Somoza regime. The health and social conditions of the Nicaraguan people had deteriorated during the 46-year Somoza reign. In the mid-1970s, five percent of the population owned 58 percent of the arable land; the literacy rate—45 percent nationwide—averaged only 20 percent in rural areas; 80 percent of the housing had no running water and 59 percent no electricity; malaria, tuberculosis, and parasitism were endemic; over 50 percent of the children were malnourished; and infant mortality was over 120 per thousand. According to Amnesty International and the House Subcommittee on International Relations, Anastasio Somoza stood out as one of the worst human-rights violators in the Western Hemisphere.

During our visit, we observed the four-day voter registration drive and saw the start of campaigning for Nicaragua's first free national elections. We also joined a U.S. and Canadian medical delegation, sponsored by the Committee for Health Rights in Central America, in celebrating the fifth anniversary of the Nicaraguan health-care system.

That system has improved dramatically, with considerable international aid. Five hospitals are currently under construction, and over 340 new health centers have been built. Peasants now have free health care. About 70 percent of the population (as opposed to 28 percent in 1978) have regular contact with medical personnel. Brigades of volunteers, trained by the government, assess community health



Student leader Marlon Zelaya Cruz organized the construction of the larger monument to honor students who had given their lives for the revolution. "If they kill me," the inscription states, "I want them to know that I have lived in the struggle for life and for mankind." The second monument was erected in Zelaya's memory after he died in combat during his last year of engineering school.

needs, vaccinate, build latrines, provide first aid, and teach about nutrition and hygiene. Polio, diphtheria, and measles are virtually eliminated; infant mortality has dropped 25 percent since 1978; malnutrition in children is down 75 percent. In 1982 Nicaragua won the joint UNICEF/World Health Organization award for the greatest achievements in health by any Third World nation, and was recognized by WHO as one of five model countries in primary care.

Medical school enrollment has quadrupled since 1978, and a new medical school has been created. Students are selected largely from regions with the greatest need for physicians. All medical students are required to participate in work-study projects, such as epidemiological studies or vaccination programs, and either help in the coffee harvest or provide manual labor in the hospitals. Our host, Dean Flores, explained to us that these practices make students more sensitive to the conditions of workers. "It is now the responsibility of the UNAN Faculty of Medicine to train physicians to interpret the health conditions of the country, and integrate their role in society to contribute to improvements in conditions for the benefit of the country," he said.

Dean Flores and medical students all emphasized to us that, though Nicaraguans freely criticize the government, there is no support for the *contras* among the population. The *contras* seek to stop the coffee har-

vest and force families to migrate from agricultural regions, medical students told us. To defend their revolution, high school and college students forgo their vacations to join farmers in bringing in the coffee crop, guns strapped to their backs in case of a *contra* attack.

Medical students also proudly informed us that, though they are exempt from the draft because of the need for medical personnel, they have organized rotating "battalions" of 20 students to help provide first aid at the warfront. After 40 days, the students return and take courses to catch up with the rest of the class, while another group takes their place at the front. Two UNAN medical student volunteers have been killed by the *contras* over the past two years.

The continuing war has caused scarcities, particularly in medical supplies. Doctors and students find themselves running out of everything from surgical gloves to saline. Clinics are short on medicines, tools, and spare parts: often microscopes cannot be used due to a lack of light bulbs, and x-ray machines are frequently out of order because there are no replacement parts. Such basic supplies as pens, pencils, paper, and books are scarce.

Because UNAN is considered a *contra* target area, faculty and staff help guard the grounds, which are crisscrossed with trenches. One evening we talked with Dean Flores while he took his turn at guarding the campus. "I have not had a day's rest since the triumph," he told us. "There is a lot of energy among the people, and a large agenda for progress. We cannot return to life under Somoza. People now have gained dignity and confidence."

What we witnessed in Nicaragua inspired us to join with other students in starting a new Harvard Medical School student organization, the Committee for Health and Human Rights. The members of this group feel that as students of health, and as American citizens, we bear the moral and civic responsibility to address U.S. policies that directly or indirectly violate health and human rights in the United States or abroad. Our efforts will be devoted to research on health and human rights, public education, organizing citizen pressure, lobbying public officials, and providing humanitarian material aid. □

Rural Awakening

by Jody Heymann

When I arrived at Mdoe's house just after dawn, Mama Mdoe had already built a fire. She wanted Mdoe and me to have a good meal before our long trip. We sat and talked with her three children in the three-by-four foot cooking hut. By the time the wood was gathered, the fire made, corn meal sifted, and porridge cooked down, two hours had passed.

I was working as a fisheries extension officer as a Peace Corps volunteer. Mdoe and I were working together in several villages in northeast Tanzania.

After breakfast, Mdoe and I walked along the main dirt road, hoping a truck might pass and give us a ride, but the gas shortage had become severe and no vehicles came our way. After three hours on the road, we headed up through the mountains along footpaths to Mdada. Mbilu, the principal of the primary school in Mdada, had been expecting us to help harvest the school pond for a week, but constant heavy rains had made it impossible to make the trip earlier. Word spread quickly through Mdada that we had come; within an hour many of the villagers had gathered around to watch and get fish. The schoolchildren loved the harvest. They harvested as many of the fish as they could by seining, then we drained the pond. Everyone jumped into the muddy bottom and a free-for-all search for the remaining fish began. The unusually good size of the harvest excited us all.

Mbilu insisted that Mdoe and I eat with him before we began the trip home. Although he could only afford one loaf of bread a week for his family, Mbilu brought it out for Mdoe and me to share. I was touched by his kindness yet discomforted by the fact that accepting it meant less for his family.

The Wasaamba I lived with gave me their friendship and taught me a

great deal about the extent to which human patience, kindness, and generosity can transform a very hard life into a very supportive one. I also found myself profoundly changed by what the experience of becoming part of a foreign community takes away—distance, and the insidious ability to divide one's view of human rights into "us" and "them."

The fisheries project was aimed at decreasing malnutrition-related kwashiorkor, but it was readily apparent that illness could affect one's nutritional status as much as nutrition affected illness. Muniri grew enough corn, beans, and greens to heartily feed himself, his wife, their three young children, his mother-in-law, and niece. They ate fish from one of the two ponds his wife cultivated and sold the rest to buy such basics as soap, cooking oil, and clothes for the children.

Every week I passed by their shamba and said hello. As the rainy season wore on, I saw less and less of Muniri. When I went to his hut to get news of him, I found out he had developed chronic malaria. The district hospital had received several years' supply of tetracycline in foreign aid but no drugs for malaria, which had an exceedingly high prevalence in the area. Muniri was unable to continue working in the shamba, and his wife had to split her time between the fields and caring for him. Their children were too young to be able to help much more than by carrying water and gathering firewood. The house fell into disrepair, as they could not rethatch the roof after the rains. They gave up cultivating fish and were able to salvage only part of their grain and bean crop, with the help of neighbors.

Living in a small village drives home the drastic economic inequalities that we so frequently ignore on the international scale. Early each morning, Mersedeh brought to my

home an old beer bottle filled with fresh milk that I bought from her mother. For the first few days she would drop off the milk and leave quickly to finish her errands before school. Then she began to linger and ask if I was making chai soon (tea filled with milk and sugar). Mersedeh was hungry and often sick. She began to stay for chai and biscuits in the morning, as did one of her brothers, Mehran. It was a short-term response to their need for more food.

Rather than give the milk their cow produced to her children, Mersedeh's mother sold it for money to buy cassava meal. (Cassava is one of the least expensive as well as least nutritious staples.) Her crops had been ruined by the rains.

The inadequacy of giving food to these children greatly disturbed me; where would it leave them when I returned to the U.S.? Searching for a less temporary solution, the agriculture extension worker and I visited the family's shamba on a barren hilltop, but found no way to improve their subsistence farm within their resources. A truly long-term approach would have to address a more fundamental issue, the grossly inequitable distribution of resources between countries.

These situations touched on only a few factors dramatically affecting health, but they brought home to me at a very personal level the profound need to better guarantee the human rights that the United Nations has long recognized as universal, including among many:

Everyone has a right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

—*Universal Declaration of Human Rights, Article 25*

At present these rights are protected in neither the U.S. nor many other countries. As physicians and as human beings, I believe we have a profound responsibility to learn about the conditions affecting basic health and human rights at home and abroad, and to work for the political and economic changes necessary to guarantee these rights. □

Alice Hamilton



When biographer Barbara Sicherman visited W. Rush G. Hamilton a decade ago to look for material about the life of Alice Hamilton, pioneer industrial toxicologist and first woman faculty member at Harvard, she found "the realization of every historian's dreams." Nothing had prepared her, she writes in the recently published *Alice Hamilton: A Life in Letters* (Harvard University Press), a combination biography and collection of Hamilton's personal letters, "for the profusion of letters, photographs, and

by Barbara Sicherman

memorabilia that littered the dining room and spilled over into the rest of the house."

In preparing this article, we had a taste of the formidable task Sicherman must have faced in selecting from the embarrassment of riches. We chose to divide this piece into two parts. First is a section on Hamilton at Harvard, adapted from a talk

Sicherman gave at the Harvard Club, augmented with a small amount of material from her book. The second part consists of a brief introduction and excerpts from Hamilton's early letters, selected from the book.

Barbara Sicherman is Kenan Professor of American Institutions and Values at Trinity College and co-editor of *Notable American Women: The Modern Period* (Harvard University Press, 1980).

Photo this page: Hamilton at 90, courtesy of Madeleine P. Grant.

A Harvard First

WHEN HARVARD MEDICAL School sought a faculty member in 1918 for a new program in industrial hygiene, dean David Edsall turned—for the first time in the history of the university—to a woman. She was 49-year-old Alice Hamilton, a special

investigator for the Department of Labor, and the foremost industrial toxicologist of the early years of this century.

Edsall not only wanted her for the new program, but, as he informed her, thought her appointment as assistant professor of industrial medicine

"would be a large step forward in the proper attitude toward women in this University and in some other Universities."

Edsall had already cleared the matter with Harvard's president, A. Lawrence Lowell, to whom he had emphasized "the fact that she is greatly superior to any man that we can learn of for such a position." Lowell had no objection "if she is really the best person for it in the country."

Hamilton had been professor of pathology at Woman's Medical School of Northwestern University from 1897 until the school's closing in 1902, and then a bacteriologist at Memorial Institute for Infectious Diseases in Chicago. In 1910 she had supervised the nine-month Illinois Survey on Occupational Diseases, the first to combine field work and laboratory study, and had also conducted the major research—a survey of lead poisoning. In 1911 she had joined the Bureau of Labor (which became the Department of Labor two years later), and for the next nine years had combined the unlikely roles of leader in the scientific study of industrial poisons, and inspired pioneer in the movement to protect workers' health.

Social reformer Jane Addams thought Hamilton should accept the Harvard position for its importance to women in general, but Hamilton could not "feel that strongly enough to take it for that reason alone." She rejected Edsall's initial suggestion that she study health conditions of employees in department stores. She held out for, and obtained, an appointment that left her half of each year free for her own investigations and visits to Hull House, Jane Addams' innovative social settlement, where Hamilton had lived for two decades.

The appointment in 1919 was regarded as exceptional, having no bearing on Harvard's policies toward women in general. President Lowell, mindful of a recent appeal by prominent women (Hamilton among them) that Harvard follow Yale and Columbia in opening its medical school to women, maintained that her appointment "seems to me quite independent of co-education in the school." HMS did not admit women until 1945, 26 years later.

"Going to Harvard is very grand," Hamilton remarked of the appointment. "If one could wear it as a decoration, like the Order of the Garter,



Hamilton at 50, courtesy of Madeleine P. Grant

I would love it." But she also felt she was "not the first woman who ought to have been called to Harvard."

Hamilton was a strong social reformer; she supported birth control, federal health insurance, and, most courageously, pacifism during World War I. Although she agreed to forgo such perquisites of faculty standing as access to the Harvard Club and tickets to football games (and tolerated each year the handwritten warning on her invitation to commencement: "Under no circumstances may a woman sit on the platform"), she would not allow interference with her reform activities. Within her first months at Harvard, Hamilton was asked by the powerful Frederick C. Shattuck—HMS professor emeritus, a recent member of the Board of Overseers, and major fund raiser for the industrial hygiene program—to cease her fund-raising efforts for Quaker food and relief programs in Germany, which was still hard hit by

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the wartime blockade. (A major financial backer of the school considered these efforts "pro-German.") She refused, explaining that:

... it would be quite impossible for me to enter into a relation with any institution if by so doing it was necessary for me to detach myself from purely human problems and to take no part in questions which are of the deepest importance to me as a human being, not as a member of a faculty or a physician or anything that represents but one side of me.

The year before she came to Harvard, Alice had written her sister Edith, "My pacifism is certainly no help to me. It is only a hindrance, but I can't change now." She elaborated, "It is as if we had stood at the

edge of an awful swamp and seen our friends struggling in it, and the militarists had said we must jump in and help them out, and the pacifists that we must try to build a bridge over, though no bridge had ever been built before." Acknowledging that it was too late to talk of a bridge, she regretted that one had not been tried, for "the swamp is deeper and more deadly than we knew."

Harvard colleagues continued to challenge her views over the years—including her advocacy of recognition of the Soviet Union and her appeal for clemency in the Sacco-Vanzetti case.

BY ARRANGING TO TEACH half the year, Hamilton had undermined any possibility of playing a leading role in the Division of Industrial Hygiene. She received a succession of three-year appointments, which in the early years she could not be certain would be renewed. She had an instinctive reluctance to put herself forward, particularly if by so doing she risked alienating others. As she wrote her sister Margaret, a teacher at the Bryn Mawr School in Baltimore, who was encountering difficulties with a new headmistress:

The more unsure she feels of herself the more she will want to ignore your importance and the less she will want to admit any debt to you. It is small, but the great majority of the Harvard faculty suffer from the same smallness. I have so often felt myself pushed into obscurity and passed over that I have almost ceased to fuss over it. I wish I could say, never mind, in the end you will get your just dues. Unfortunately often one does not get one's just dues, they are grabbed and one cannot grab back. What I have made up my mind to is this. I might possibly get juster treatment if I fought for it, but that is very questionable. On the other hand there is no question that if I fought I should lose my pleasant relations with the men, and I would rather cling to the pleasantness than lose it and perhaps not get anything else.

In her 1943 autobiography, Alice wrote humorously about the football tickets, but at the time she smarted at the slights, whether it was the open disdain of a young instructor, "an ex-football champion, a 'he-man,' with a complex against treating a woman as an equal," or the more customary experience of being excluded. Often

she wondered whether she was living up to what was expected of her, and at a particularly discouraged moment wrote:

Really I have never had such a deep sense of failure as I have this year. It is the end of my sixth year here, and I cannot think of one thing that has gone well and I know that the fault is nobody's but mine, that I came brashly into a milieu to which I was not adequate, and tried to fill a place which needed more brains than I have.

*Although she agreed to
forgo such perquisites of
faculty standing as football
tickets, access to the
Harvard Club, and seating
on the platform at
commencement, Hamilton
would not allow inter-
ference with her reform
activities.*

Despite her marginal situation, Hamilton made important contributions to the work of the Division of Industrial Hygiene. Through her initiative, several lead-company presidents she had known for years funded a three-year study of lead poisoning, with no strings attached. Headed by Joseph Aub, a young physiologist, the project discovered how lead is absorbed, stored, and eliminated from the body, and developed the first effective treatment for lead colic.

Aub, in whom Hamilton sometimes confided, later acknowledged that she had never received the recognition she deserved from her colleagues. He attributed the tendency to "minimize her efforts" partly to the fact of her sex and partly to prevailing academic disdain for practical achievement. Aub himself believed that no one, with the possible exception of Sir Thomas Oliver (whose 1902 textbook had initially inspired Hamilton's interest in the subject), knew

more about industrial diseases.

In 1935, still an assistant professor, Hamilton retired from Harvard. She then returned to the Department of Labor, which, under Frances Perkins, was reentering the field of industrial medicine. There Hamilton conducted her last major survey—an investigation of the viscose rayon industry. In her later years, she protested America's anti-communist foreign policy and the concomitant in-

fringement of civil liberties at home (as duly noted in her FBI file). In 1963, at the age of 94, she advocated withdrawal of United States troops from Vietnam. Three months after her death in September 1970, Congress passed the Occupational Safety and Health Act, the law that first empowered the federal government to control the diseases of the workplace over which she had stood watch for so long.

Dearest Agnes...

The following collection of excerpts from Alice's early letters to her cousin Agnes Hamilton are selected for what they reveal of Alice's formative years as a woman, physician, and scientist—up to her articulation of her interest in "general reform."

Alice grew up in a privileged and intellectual family that fostered achievement in daughters as well as sons: Edith Hamilton, well-known popularizer of the classics, was her older sister. Although Alice's choice of medicine was less in accord with the family's patrician aspirations than Edith's pursuit of the classics, the late 19th century was something of a golden age for women in medicine, and Alice acquired an outstanding education: a medical degree in 1893 from the University of Michigan (where women constituted nearly 30 percent of her class), followed by graduate work in Germany and at Johns Hopkins.

Edith actively opposed her sister's choice and let Alice know that she considered science a "disgusting" pursuit. Only her cousin Agnes, and probably her cousin Allen Williams, remained true. Agnes—who went on to spend 30 years as a settlement worker at the Lighthouse in Philadelphia—wrote in her diary that she "would rather Alice be a physician than any thing else. I care more for that than I do for being an architect myself."

We start with Alice's entrance to the Medical Department of the University of Michigan in March 1892.

Ann Arbor
March 6, 1892

... Tomorrow I am going to my first lecture, on Materia Medica, at half past nine. Then comes one on Surgery, then one on Obstetrics and that finishes the morning. After that I suppose I shall drag what is left of me to dinner and study during the afternoon, if I have any courage left to study with. I have not the slightest idea what my standing will be, whether I shall find myself utterly deficient or pretty well advanced. It is so queer to be one of so many and of such very little importance. I am absolutely nobody, for the first time in my life, with no family name or reputation to fall back on, just one of the multitude with no more deference shown me than any of the others. I saw three "female medicals" on Friday when I was with Mother and more forlorn, micky looking specimens you couldn't find in the overall factory. ["Micky" was a derogatory term derived from the slang word for Irishman.] But I met a nice one this morning, a Miss Bishop and she promised to pilot me around tomorrow.

Ann Arbor
March 20, 1892

... I have decided that if I were not a physician—I mean going to be—I should like to be a professor's wife in a college town. They seem here to

have such very nice times together and they are such lovely, intellectual women and of course their husbands are the most fascinating part of all. There are three whom I am very much gone on, all married, and the one wife whom I have met is charming. ... [T]he men here are respectably behaved, but there is a sort of constant aggressiveness on the part of the women and half-veiled ridicule on the part of the men, that one feels all the time. ...

I went over to see Miss Rich and Miss Reilly yesterday afternoon. They are the two Freshmen at our table. Miss Reilly is one of the prettiest little things I ever saw, strikingly so here, for Ann Arbor abounds in homely girls. It struck me as so strange the way those two girls live. They don't look a bit over seventeen years old, and yet there they are living as independently as if they were women of thirty. They have a landlady, to be sure, but she hasn't any more to do with them than the chambermaid has, and they receive men in the evening and go off to evening parties with them, men they never met till they came here, and no mother around or anybody. ... The girls are not silly about the men, but all their good times, all their excitement, is inseparably connected with them. About the lovely times that girls have just among themselves, they know nothing.

Ann Arbor
October 2, 1892

There is no hospital meeting this afternoon, so I am not going out, but have settled myself for the afternoon, to read Hypatia and write to you. ... [*Hypatia: or, New Foes with an Old Face* (1853) was a novel by the English clergyman Charles Kingsley about a woman Neoplatonic philosopher in Alexandria who was stoned to death by a band of monks. It illustrated Kingsley's Christian Socialist philosophy, in which Alice and Agnes were then much interested.] My Chemistry is off my mind at last, and it was taken off in the nicest way you ever knew. Friday evening I came home from supper and found the Doctor [her professor and landlord] out on the porch alone, looking at the moon and evidently very forlorn because Mrs. Prescott had disappointed him

and had not got back that afternoon. He asked me what I meant to do and I told him that I meant to cram Organic all evening, upon which he looked a little disappointed and said that he had thought of asking me to go driving with him. Of course I told him that I would cut fifty examinations rather than miss that, so we went. He drove us way out in the country, and you can imagine how lovely it was, soft and warm and moonlit, the air heavy with the fragrance from the swamps and fern thickets, the deepest stillness everywhere and the dearest man in the world in the buggy beside me. When we got back he proposed that I should come into the sitting-room and talk over a few things in chemistry with him and he might clear up some points for me. Naturally I was only too glad to, and I asked him all the tough points and he explained them, asking me a few questions, but only incidentally, and then when I rose to go, he informed me that I had passed a very good examination and he would give me credit for it. Wasn't that the loveliest way to hold an examination?

❧

In July 1893, Alice started her internship at Northwestern Hospital.

❧

Minneapolis
July 16, 1893

I have been here just thirty hours and I feel as if I had more to talk about than ever in such a short time before, except the first day at Farmington. In this time I have been through the various stages of bewilderment, utter despair, then a slight ray of hope and now temporary cheerfulness. . . . [At the hospital I] was told that Dr. Everitt, the resident physician, was making her rounds of the wards and I should have to wait. I waited ten minutes, growing more and more frightened as time went on. Then the door opened and a neatly dressed woman, with a strong, sensible face, came in, greeted me very kindly and offered to show me my room. . . . As my trunk had not come, I asked her to show me over the Hospital and she did so. We went from room to room, while she pointed out the patients, explained their ailments and treatment and,

incidentally, my future duties. She would say "The surgical and gynaecological treatments are given by the interne every morning, the electrical in the evening. The nurses are expected to go to the interne in any emergency, night or day. The interne makes the rounds with me in the morning, by herself at night. She takes

your powers, you could send for me." Complicated case! why I shudder at the thought of the simplest one in the world. I had far, far rather amputate a leg. We ended up at the pharmacy, where she put the last touch to my despair by saying that, as there was no pharmacist, the interne was expected to put up the pre-



Hamilton at 24, the year she graduated from medical school

the history and makes abstracts of the treatment of each patient. The obstetrical work is entirely hers." At this point, while I was wondering if I could stand any more, she pointed out a woman to me. "She expects to be confined at any time and will be your charge." I gasped. "Dr. Everett," I said "do you mean that I am to manage the case, when it comes off?" "Certainly" she said. "Of course if it should be a complicated case, beyond

descriptions. So besides all the other methods of killing, I am to have the chance of poisoning my patients too. . . . [Dr. Everett] is an object of wonder and admiration to me. Not of unmixed admiration, for she is desperately unscientific, her surgery is slovenly, and her lax methods in physical diagnosis would turn Dr. Dock's hair gray, but she is so decided, has such confidence in herself, such calm, authoritative ways with the nurses and

such a cheery indifference with the grumbling patients, that I constantly envy her.

Minneapolis
July 23, 1893

... Don't you ever write me a letter like your last one. Talk about making me feel better, it made [me] feel unutterably blue. It simply showed me what a beautiful, high idea you have of my work and what a low one I have myself. For I don't think of it as a mission of healing at all. In the first place I don't feel as if I were healing. When a surgical case heals up, or a typhoid goes home well I feel as the backers of the victorious man in a prize-fight feel. They have been watching the fight and helping and encouraging their champion and he has conquered, but he has done the fighting, not they. And when they don't get well, I don't find them at all less interesting, often more so. Indeed Agnes, you mustn't misjudge me so, and fancy that because I chose to study medicine and was fortunate enough to have a father who would let me, I have proved that there is something in me. I simply have placed myself in a position that will show if there is or isn't, and day by day I am finding out that there isn't. And some day you will find it out too, only I hope I will die first.



In September 1893, Alice moved to Boston to take an opening at New England Hospital. Of her reasons for leaving, she wrote Agnes: "The work is fine, but it is a pretty lonely, desolate sort of a life, and a winter of it would be very hard. Boston will be so much better." The move brought Alice closer to her cousin Allen Williams, who was studying medicine at Harvard.



Roxbury
October 29, 1893

Allen and I went to Trinity this morning. ... [W]e entered just in time to hear the Te Deum sung most magnificently. Of course you remember the church. Really I believe it satisfies

me more than any church I have ever been in, as a building I mean. And to-day the sunlight came and went in the most beautiful way, making a fresh pleasure every time it lit up those glorious windows. ...

We had no Sunday babies this time, indeed we have not had a single case for a whole week. Do you know I believe I shall let myself out to you to-night and just tell you what I think of this old place. ... I shall take you as my safety valve and pour out all the abuse that has been piling up for six weeks against this narrow, petty, squabbly, idiotic place. ... Why under the sun it has the reputation of being the best training place for internes I cannot conceive. It must be because it is so very old and so many prominent physicians have had their internship here. Oh it is such a petty little place! There are officials on officials, none of whom have half enough to keep them busy and all of whom, therefore, try to get the work into their own hands and thus give rise to squabbles innumerable. We have enough officials and internes to run a large hospital and we have an amount of etiquette and red-tape that would overstock Bellevue. ... As one of the old internes, now a practicing physician told me, "one never discovers how much wickedness and rebellion there is in one till one has had a year in the New England." And I never thought before that I was tenacious of my own dignity or jealous of my rights, yet here I find myself growing quite red-hot when I am treated—as we all are—like a raw schoolgirl, reproved before my own patients for a bit of Ann Arbor heresy, or pitched into by the Irish scrub-girl for not putting away my things in the drug room. ... Really though, I would stand it all if they would give me work. But to feel that I am simply losing a year which I cannot spare, sitting around and reading text books, when I need practical work, kept by idiotic rules from using even all the inferior opportunities which I have—well it is simply maddening, that is all. And the visiting physicians are so bland and patronizing, and so convinced that there is no hospital like the New England and no advantages like ours. Someday I know I shall speak my mind out to them, for it is growing too full not to spill over sooner or later. I won't put it down to the fact that they are all women,

for so they are at the Northwestern, but they are narrow women, women who study gynaecology and obstetrics and know absolutely nothing else, who are in a state of self-distrustful antagonism to all men doctors, and who escape discovering their own inferiority merely by avoiding their superiors. ... It irritates me to think that there is not a man medical graduate in the country who would accept so inferior a position as this, yet here are we, who know just as much as men students, obliged to accept places where we must divide with six the work that is only enough for two. ...

There, I have let out some of myself and I feel better for it. This place makes me feel as if I were tight-laced and must burst my whalebones for a good, long, big breath. So if I elope or come sailing home or do something suddenly awful, you at least will be somewhat prepared.

Roxbury
December 5, 1893

... I will acknowledge that I have done a great deal of unnecessary grumbling, but, my dear, do you think it is best to take quietly and without protest, things that you know are wrong, absurd, and unjust? I truly believe that if the internes who have been coming here for years, had made a strong stand against the treatment accorded them, that the chiefs would have seen that they must improve matters. As it is, whether from politic desire to stand well with the authorities, or from lack of courage to face an angry woman—and I must confess that it is not a pleasant thing to do—the internes have submitted to everything and contented themselves with abusing the place after they were safely out of it. ... They promised me good experience and teaching and they are giving me neither. I know it is only for a year, but think how much a man can learn in one year's internship. ... And do please write me just what you think of all that I tell you. Sometimes I really am puzzled to know how far it is right to resist and how far I ought to submit. For you see it is not all the treatment of us internes that we resent, that is a small matter, but our chief's ignorance is

really great enough to be dangerous. We do not claim to great diagnostic powers ourselves, but when Dr. Harrington tells a woman with beginning melancholia that there is nothing the matter with her but unreasonableness, when she refuses to notice heart disease that we all can diagnose, when she keeps poor working women here week after week without ever finding out what is really the matter, why then it becomes a very nice question as to whether it is right to hold one's tongue. [Harriet L. Harrington, attending physician in 1893, was asked to resign the following year.]



By 1896, Alice had studied bacteriology and pathology in Germany. Her cousin Allen Williams, to whom she felt a great attachment, was engaged to marry Marian Walker, a Radcliffe student who intended to become a physician.



East Quogue, Long Island
September 12, 1896

Allen's letter came in the same mail with yours. He had written to Frankfurt, but hearing I was home he sat down and wrote another letter, which is certainly proof of a change of heart if anything could be. My heart just stopped short when I read his first words, for in spite of my guess I hadn't really believed it. . . . Would anybody believe that that introspective, slightly cynical, critical, over-cultured fellow could be so naive, so unconsciously trite, so deliciously young! "Something has happened which has wholly and entirely changed me." "Love is really quite different from anything that has been written about it." . . . The one thing about it that troubles me, they seem to take very calmly, and that is the long engagement. If I were Aunt Mary and Mrs. Walker I would make it possible for those two to marry within a year's time. It is all nonsense that a man may accept an allowance from his mother while he is single, but must never marry until he can support a wife. . . . And I do think it such nonsense Marian's studying medicine. That is the fault of the transition period in which we live. Girls think now that they must all

have professions, just because they are free to, not realizing that the proper state of society is one in which a woman is free to choose between an independent life of celibacy or a life given up to childbearing and rearing the coming generation. We will go down the path of degeneration if we lose our mothers and our home-life. We can easily get on with fewer professional people. I don't mean that she ought not to take up whatever studies she chooses, but she ought not to choose a work which is in its nature absorbing, which cannot be laid down and taken up again. It isn't as if the world were in crying need of doctors, it has too many already. I suppose she might say that she has a right to follow her own tastes as well as Allen. Well, let her do it then, let her study medicine, but if she practices it simply means either avoiding the burden of maternity or fulfilling its duties imperfectly.

Isn't it queer to be thus solemnly discussing Allen's future wife? Do you actually realize yet that love has come to one of us? And don't you feel a little afraid when you think of it? I said that I would not let myself be afraid, but I can't help it.



Alice spent the year 1896-1897 at the Johns Hopkins Medical School, where she was relieved to be accepted "without amusement or contempt or even wonder."



Baltimore
December 6, 1896

. . . I don't know exactly why Allen resented my letter about professional married women. I hadn't the least idea he would. I had told him that I would not, in Marian's place, think that I ought to take up two professions at once and that wifehood and motherhood ought to be considered a career worthy of the best efforts of the most intelligent women. And then he wrote back a very provoking letter, assuming that I took my stand on the old conservative ground and held views just like Miss Elizabeth Porter's. So I wrote back and explained my position just as I did to you and treated

the case simply from a general economic standpoint, without even thinking of Marian. And he does not seem to have liked it, more's the pity, although he said it was just what he wanted me to do. I don't think that I go any farther than you do. You see Marian's degree from Radcliffe gives her a means of support in case of emergency and one that she could use much more effectually than her medical diploma, for medical practice can hardly, you know, be taken up as a means of livelihood on short notice. And so I quite agree with you that every woman ought to be equipped with some trade or profession which she could use if needed, but then as I believe in every girl having a very thorough education, that comes in with my system. . . .

What interesting things you are reading and thinking and hearing about. I wish I knew something about sociology. . . . While I was in Wilmington I had some long talks with Margaret's aunt, Miss Madge Hilles. She is the finest woman. She is interested, practically interested, in social purity, temperance and municipal reform and she is immensely respected by the men of Wilmington. It was her social purity work that specially interested me, for I always have a feeling that that is the work I ought to take up. It seems to me that a medical woman ought to be able to handle the question more intelligently than another, don't you? . . . [I]t seems to me that one has no right to take up a work practically before one has decided the aim to which all work of that sort ought to tend, what is the real solution of the whole matter, even though one has no hope of bringing about that solution oneself. . . . I wish that I were, like you, always most interested in the practical side of a question, but instead it is always the theoretical that appeals to me, just as it did in medicine. I cannot care as much for the details of schemes for practical reformation which may have immediate good results but which do not touch the real cause, as I do for big theories of general reform which of course I can never really hope to help in at all. □

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*On Cerebral Technological
Obsolescence*

Even Homer Sometimes Nods

by Norman Geschwind

We would like to be able to claim that we've been jealously guarding the following article for years, that we have been well aware it would be a natural follow-up to our recent several-part piece (Winter 1984) on the New Pathway Project in General Medical Education, and that we've plotted its appearance to coincide with that of a Pulse item announcing a \$5 million gift of computers and money from Hewlett-Packard Company for the New Pathway.

The truth is much more serendipitous. Six years ago, when the late Norman Geschwind '51 wrote this piece for the first HMS Educational Workshop, his manuscript made its way into the Bulletin office, into a file, and into a drawer—a drawer we investigated, not expecting buried treasure, while in the planning stages of this issue.

The purpose of that workshop, first of an annual series that three years later yielded initial plans for the New Pathway, was to consider a simply-stated question: "What do we want HMS graduates to know how to do, and how does the learning environment at HMS foster or hinder the achievement of these goals?" Held at the American Academy of Arts and Sciences headquarters in Jamaica Plain in June 1979, convened at the initiative of Dean Tosteson, the workshop was attended by roughly 75 HMS faculty members, students, and house officers. Geschwind was one of several participants asked to present papers that were followed up with panel discussions.

Norman Geschwind's obituary appears in this issue. He was neurologist-in-chief at Beth Israel Hospital, and HMS James Jackson Putnam Professor of Neurology.

I have been invited to prepare a paper for the Educational Workshop on what the Harvard Medical School student should learn. Since I am no expert on education, I thought that perhaps I would make some comments about an area in which I do know a small amount. I will therefore start by discussing some unusual specializations of the brain and I hope that I will be able to draw some conclusions that may be relevant to the problems of medical education at Harvard. I will also make some

historical comments that should be looked at with great skepticism, since my knowledge of history is probably as poor as my knowledge of education. I hope that some of these reflections will not appear to be totally irrelevant to our mission in this workshop.

There is an extremely rare type of person called an *idiot savant* (a French phrase meaning well-informed idiot), who sometimes comes to medical attention, but is more likely to be commented upon in the lay press. The term is rather dramatic and apparently paradoxical, since it suggests the existence of someone who, in some sense, is stupid, although extremely well informed.

I would like to suggest that this characterization is inaccurate, and that looking at such people more closely may give us some important clues about desirable qualities in an educational process.

*Those of us who have
grown up reading forget
that over most of the
history of mankind there
has been no means of
recording extensive
information.*

The typical *idiot savant* may exhibit fantastic capacities in memory. Such a person may be able to give long lists of batting averages, names of baseball players, political figures over many decades, and even endless lists of telephone numbers. In many cases this ability is not the result of hard work and review, since many of these people can carry out extraordinary feats of memorizing new pieces of information. Naming these people by a term that implies they are mental defectives is really not quite appropriate, since some are clearly people of normal or high ability in other areas. There is no doubt that sometimes these talents exist almost in isolation—a circumstance that has probably led to an overstress on the dissociation of abilities.

Such dissociations can exist in many areas. Certainly those people with remarkable memories are the most conspicuous. There are others who show quite astonishing calculating abilities. These are the people who can give you almost instantly the cube root of some seven-digit number taken at random, or can with tremendous speed tell you what day of the week January 8, 1492, fell on in both the Gregorian and Julian calendars. There are other abilities that are related—remarkable chess playing, for example, in itself a rare but well-known talent, but stressed in some cases because of its relative isolation.

As I have already noted, the possession of any of these special abilities need not imply that the person is unique in other areas. Some of the great chess players have high degrees of achievement in other fields, although a few exist who do not. Indeed, a little consideration will show that such discrepancies appear in areas where we never use the term *idiot savant*. There are some musically talented or artistically able people who would be considered mediocre in terms of verbal intelligence, yet it must be recalled that there are musicians and artists who are exceptionally intellectual in every way. Again, there is sometimes the notion that athletes of significant accomplishment are people of delimited abilities, but again we find that among superb athletes there is a full range of other intellectual abilities.

The real issue that must concern us is why people with these abilities should exist. There is no way we can talk about the specializations of the brain that lead to the possession of unusual talents. But we *can* look at them in the light of Darwinian theory. Are there any reasons why such special talents should have been selected out for survival? This perspective is obviously quite different from that which regards them as some sort of bizarre curiosity, the result of some curious, playful prank of nature.

My guess is that the importance of these talents holds a clue. I suggest that under the appropriate circumstances, mostly in the past, those who have possessed "*idiot savant*" memories have not been regarded as defective in any way, but have been almost certainly considered to be exceptional members of society, who have de-



served admiration and, indeed, have been given special treatment.

The obvious advantage of people with such exceptional memories is that they can serve remarkably important functions in non-literate societies. Those of us who have grown up in a society in which the majority of people can read forget that over most of the history of mankind the average human has been a member of a group in which there was no means of recording extensive information. If information cannot be retained, one is faced with the great tragedy of all kinds of knowledge disappearing very rapidly from the group. People with special mnemonic abilities represent a vital resource. They are the fountain of knowledge for the history of the group. They pass on verbatim the great literary works; they have detailed information concerning the weeks traveled during migrations, the best fishing and hunting grounds, the characteristic strategies of enemies who have perhaps not been encountered for 50 or 60 years, but who may be lying in wait at any time just over the next mountain range.

We do not have to seek very far to confirm the existence of such people. Those who have spent time in New Guinea will point out the existence of members of the remote tribes who do possess such superb memories. One such possessor of a remarkable memory is one of the main figures in Western literary tradition: Homer, who was probably not a single person, but a composite of many wandering poets who carried an intact literary tradition from one generation to the next.

Why should it be that people who carried on important traditions, who were so highly regarded by their societies, and who fulfilled such essential roles in the past, should now be regarded as curiosities, likely to be labeled, even when it is not appro-

priate, as mental defectives with special odd talents? The answer is, of course, rather simple. The brains of these people have become technologically unemployed. Ever since the invention of printing in China and Germany, the need for such people has progressively diminished. It is astonishing that something as simple as the printing press should have made such people almost non-essential, and radically altered their position in society. The concept of technological unemployment is, after all, not a new one; we all know about the unemployed blacksmith, and the shepherd. Great physical strength has become progressively less important in the job market, but the idea that

*Medical students
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not possess total
knowledge.*

certain kinds of brains could be unessential is too rapidly overlooked. We live today precisely in an age in which there is a remarkable advance in technical methods for remembering and retrieving data and for carrying out a wide variety of intellectual activities.

Oddly enough, there still seems to be at least one field that has been resistant to this great advance of intellectual technology. Although we speak of medicine as being at the forefront of scientific advance, we have continued to operate our educational system and our hospitals on the basis that information retrieval is best achieved by individuals who have become specialized in this activity.

It does not take much reflection to reveal how odd the situation is. Medical students constantly point out

their great fear of making some terrible error of omission or commission in some clinical situation because they do not possess total knowledge. Their instructors, both preclinical and clinical, stress that each bit of knowledge may be critical to their management of some patient they may see once in a lifetime. They are told stories of remarkable clinical achievements and of lives saved by HMS graduates who, in fact, did remember some vital pearl.

The issue is not that these stories are untrue, but that unfortunately, and I would like to emphasize that word, they are true. We know of instances where one of the many professionals who have seen a patient in a teaching hospital has come up with the indispensable concealed bit of information that makes a difference. These events may be rare, but their importance cannot be overestimated, since they make a critical contribution to the well-being and even the survival of the patient. A little reflection, however, shows that we have drawn the wrong conclusion from these occasional instances.

One need only consider the usual clinical discussion on the ward about a patient with unusual symptomatology. In general, the discussion relies on the knowledge of those present. In some ways the structure of teaching hospitals has shown a Darwinian evolution designed to maximize the retrieval of obscure bits of information, since the patient is presented again and again, so that it is not rare for anywhere from 10 to 100 people to know about the clinical problem. On the other hand, the hunt for further information about the problem is really rather haphazard. If one is dealing with an emergency in the middle of the night, it is often impossible for anyone to start to search for information. Even for the non-emergency patient, the hunt for knowledge may depend very much on the personal energy of the medical student, the house officer, or sometimes even the Attending. On the other hand, there are certainly many instances in which no organized literature hunt is made.





The situation is bizarre. One would have thought that when human life was at stake we would not rely on the chance presentation of data concerning the patient to a large number of people—and we would not rely on the chance, undirected search through the literature that goes on in so many instances. Our information-retrieval systems are technologically too similar to those that existed in ancient Greece, and even as Homer might sometimes nod, making his very occasional error, the greatest of clinicians may also do the same. It is astonishing that there is, to my knowledge, no teaching hospital in Boston in which there are computer terminals on the ward. Furthermore, even in the hospital in Iowa City I visited last year which *did* have computer terminals on the ward, the usefulness of the technology was markedly limited. Would it not make sense for the medical student or the house officer to be able at the flip of a switch to make a literature hunt and to be able to see the specific papers he or she is looking for on the screen of the computer? Those who buy parts for their washing machine at Sears Roebuck will see such a system in operation, but not those who are trying to plumb the mysteries of a challenging patient.

For curious reasons based on tradition, lack of imagination, and lack of adequate funding for appropriate studies, we continue to rely excessively on the fallible human memory. The result of our failure to handle this problem adequately is that the medical student is bombarded with moralistic preaching about the necessity to learn everything. Does the student ever succeed? The answer, I think, is simple: he or she never does. The person who came nearest in all my experience was a classmate of mine at HMS who knew nearly everything, yet even he had his shortcom-

ings. The medical student today does not merely fail at this task; he or she fails dismally. In my view, this failure cannot be corrected by some simple sets of maneuvers in dealing with the curriculum.

It seems to me that the excess emphasis on learning vast amounts of information, while we fail to provide doctors with adequate methods of retrieving information exactly when they need it, has serious effects on the doctor. If the doctor manages to learn some considerable fraction of this total, he or she perhaps succeeds in becoming an *idiot savant* who may be technologically unemployed in a few years when more adequate industrial techniques are available. Unfor-

*We live in an age in which
there is a remarkable
advance in technical
methods for remembering
and retrieving data. Oddly,
medicine has been resistant
to this intellectual
technology.*

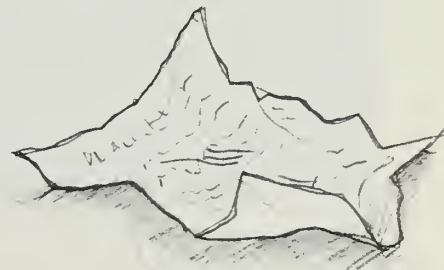
tunately, the doctor sacrifices many other options, spending perhaps too many hours in his or her youth learning details that could better be retrieved from a computer—just as in my day we had to learn details of separation of the *Salmonella* group of organisms.

I suspect that much of the knowledge we feel is essential today is really no more useful than that we were forced to learn in an earlier generation. The student who succeeds by brute force in acquiring so much knowledge still may suffer from the major defect of being incapable of reading medical papers critically. The information the student is given in class has been carefully winnowed by the instructors so the student does

not face the difficult learning process of rejecting the overtly or subtly nonsensical. Yet the ability to read critically will be one of the major factors in determining the medical decisions that student will make in the future. One need ask how many surgeons have actually brought critical intelligence to bear on the issue of whether mastectomy or only partial excision of breast cancers should be carried out.

Finally, it is my belief that this overload of information prevents students from embarking on adventurous studies of areas that intrigue them, and, rather than recruit people to research in the frontiers, may often turn them off.

Let me summarize this rambling paper. It seems to me that too much of medical education is an attempt to substitute for our failure to use available information-retrieval methods. I believe that the medical student will need certain information 25 years from now—such as the vocabulary of the field. And the student should be taken through the reasoning of certain areas which are complex intellectually—but should not be taken through every area that requires the mere possession of information. He or she should be given more of an opportunity to learn about exciting frontiers, and therefore simply must have that leisure essential to all academic activity, and which is so often lost in the puritanism of medicine. I add again that this puritanism results in an excessive load on the individual—which in turn results in neglect of better technological methods. Furthermore, our medical education neglects that stress on critical reading which is essential in medicine. It should be our function to avoid cerebral technological obsolescence, and just as the invention of modern machines freed humans from physical drudgery, we should use those great advances which can free us from intellectual drudgery. □







Stanley Cobb in his office in Building D in the early 1920s

An Appreciation of **Stanley Cobb**

by John C. Nemiah

After Stanley Cobb's death in 1968, it was discovered that the bulk of his personal papers and correspondence had been irretrievably mislaid. The potentially catastrophic loss for Cobb's future biographer proved in the long run to be a blessing in disguise. For when Benjamin V. White Jr. '34, Cobb's son-in-law (and quondam fellow in psychosomatic medicine), embarked on writing the biography, he made up for the lack of documentary evidence by interviewing Cobb's many former colleagues and students. Based on the information thus obtained, White's volume, *Stanley Cobb: A Builder of the Modern Neurosciences*, recently published by the Francis A. Countway Library of Medicine, has a freshness and vibrancy that could not have been achieved by relying on archival sources alone.

A formal and properly critical review of White's biography can be written with true objectivity only by one who is further removed from Cobb's powerful influence than those of us who knew him as a teacher and friend. And yet, from that very knowledge, we can see more clearly than

most the wonderful likeness of the portrait White has so skillfully constructed from the many separate impressions and memories he elicited from those he interviewed. And, having met Stanley Cobb again in the pages of the book, we recall anew his important contributions to American psychiatry at large and to each of us individually as his pupils and members of his clinical staff. The reflections that follow, admittedly personal and idiosyncratic, arise from that renewed encounter.

Stanley Cobb, although very much a man of the 20th century, fully alive to the social and scientific issues of the modern age, always struck me as one of the last of the great Edwardians. He had grown into young manhood before the outbreak of World War I, and he appeared to be imbued with a sense of confidence in the orderliness, rightness, seriousness, and permanency of the world—a

John Nemiah '43B is HMS professor of psychiatry, and psychiatrist-in-chief at Beth Israel Hospital. He is now on sabbatical, working on a book on the psychosomatic process.

sense that remained unshaken by the cataclysm of two world wars and the unleashing of nuclear energy. Cobb's inner certitude gave him an air of dignity and quiet strength that commanded respect and deference. (Residents and junior staff members would never have dreamed of calling him by his first name.) Yet one sensed, beneath the somewhat reserved and distant exterior, a warmth and concern that aroused deep affection for the "chief"—an emotion heightened by occasional glimpses of his profound sense of the comic and his earthy humor and speech.

The deference we showed contained never a hint of obsequiousness or subservience—nor were they demanded. Stanley Cobb was a liberal in the real sense of the word: he was passionate in his respect for individuals and their ideas, no matter how different from his own views and interests. Indeed, the Psychiatric Service he created at Massachusetts General Hospital in 1934, and then directed for two decades, was based on the premise that there are many paths up the mountain of truth.

Cobb's primary interest lay in understanding the function of the brain, and his examination of psychiatric patients presented to him at rounds almost always included a careful neurological assessment. At the same time, he was a strong early supporter of the importance of psychoanalysis for understanding emotional illness. He was instrumental in bringing several world-renowned European analysts to Boston during the late 1930s and early 1940s; he encouraged his residents to obtain a training analysis, which was supported by special funds set aside for the purpose; and he underwent analysis himself—some said three times, once with a Freudian, once with a Jungian, and once with an Adlerian (though the truth of this claim was never really substantiated).

I once had a personal taste of Cobb's breadth of vision and tolerance of ideas. As a resident on his



As a medical student

service, overwhelmed more than usual with the complexity and vagaries of psychiatric phenomena, I made so bold one day as to complain to him about how much there was to learn. His response was immediate and heartfelt. "You're absolutely right," he said. "It's a tremendous field, and you can't possibly master it all. The best you can do is pick an area that interests you and make it your own. But for heaven's sake, whatever *you* do, keep an open mind to what the other fellow is about." That advice is as wise and necessary today as it was nearly four decades ago.

Cobb's intellectual openness and integrity were matched by the fairness and honesty with which he dealt with

his colleagues. At another point during my residency, I wrote a paper at his suggestion on a smallish series of patients with anorexia nervosa (then a rare and little studied syndrome) who had been admitted over the years to the MGH Psychiatric Inpatient Service. Cobb was extraordinarily helpful during the clinical investigation and the writing of the manuscript, and was instrumental in persuading a major medical journal to consider it for publication. As I was completing the final draft of the manuscript, perhaps with more modesty than I really felt about my maiden voyage into the scholar's world, I asked him, "Should your name come first on the paper, Dr. Cobb?" Without a mo-

ment's hesitation he replied, "My name doesn't belong on it at all. It's your work. If you wish, you can acknowledge my help in a note at the end of the paper." *O rara avis!*

Forty years ago, running a clinical service was a simpler task than it is today. The modern search committee, over months—nay, years—of deliberation, seeks a candidate who will be an Osler at the bedside, an Einstein in research, and (perhaps most important of all) a Lee Iacocca of administration and financial wizardry. In the 1940s, a major professorship could be filled literally overnight, and the primary criterion for selection was excellence in scholarship—a talent for generating new knowledge, and teaching that inspired the staff to pursue similar academic goals.

Administration was a minor part of academic life in those days. There was a curious notion that professional people could be trusted to do their jobs without the incessant monitoring and bureaucratic record-keeping of audits, effort-reports, and formal peer review. Stanley Cobb, very much at home with this old-fashioned philosophy, assumed that his staff members could be counted on to carry out their academic and clinical responsibilities without his constant vigilance and supervision.

We knew that Cobb probably had some administrative duties (for example, my appointments as a resident and later to the clinical staff were both decided on and arranged in 20-minute meetings with him). And, if we thought about it, we were aware that he must occasionally have had to grapple with the finances of the department (though when a hospital bed cost \$7 a day, residents received \$41.67 a month, and junior staff members started at \$3,000 per annum, budget-making could hardly have required more than a bit of figuring with a pencil on the back of an old envelope). But we never really thought of Stanley Cobb as an administrator. Though a full professor, he lectured



Cobb, who was ambidextrous, amazed his students by drawing on the board with both hands simultaneously.



MGH residents in 1954. Stanley Cobb is seated second row, center. Behind him and to his left is John Nemiah.

regularly to medical students; he actively and consistently took part in clinical rounds; and he was very much involved in the teaching and supervision of residents and in leading academic conferences. The scientific articles and textbooks he regularly wrote, in impeccable prose, were—like everything else he did—models of excellence for his younger staff members. He led us by example, not by administrative fiat and regulation, and everyone found something in him to admire and love.

In my opinion, Stanley Cobb's most admirable quality, apart from his infinite respect for each of us, was the breadth and energy of his curiosity. Two major areas of inquiry

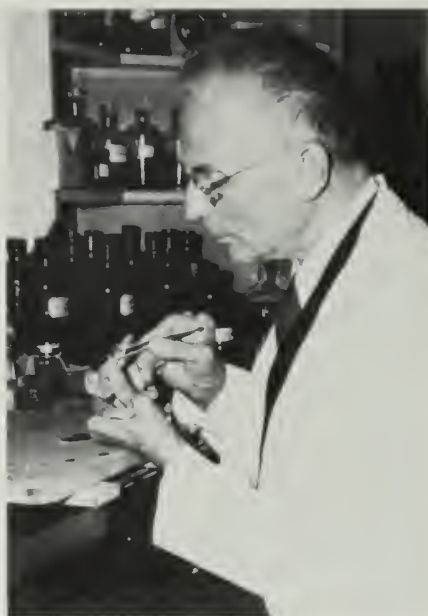
in which he predominated have had a significant influence on my own professional interests and career. First and foremost was his pioneering investigation of psychosomatic phenomena. He was indefatigable in his attempt to understand how life stresses could lead to somatic dysfunction. His approach was often systematic and empirical, collecting clinical data to demonstrate correlations between emotional stress and bodily disease. But he also made use of introspective observations about his own symptoms—such as his lifelong stammer, which originated in a frightening episode in his early childhood—which he would openly and candidly share with his students and colleagues.

Once he reported to us on rounds that his arthritis had been especially painful that morning as he anxiously anticipated a particularly difficult and potentially fiery committee meeting later on in the day. He had been tempted, he confessed, to stay home in bed, and only his New England conscience, combined with his sudden insight into the psychosomatic nature of the exacerbation of his pain, overcame his temptation to give in to his symptoms.

And then there were the birds. Stanley Cobb's first scientific love had been ornithology; indeed, his earliest published paper had appeared in *The Auk* long before he embarked on his medical career. During his many years at HMS the study of birds remained an absorbing but secondary avocation. However, toward the end of his tenure as chief of the Department of Psychiatry at MGH he turned once again to his earlier love, with a special concern for the structure and function of the avian brain. It was a course of study he carried on long into his so-called retirement, with the resulting publication of a number of original and important papers.

In an attempt to fathom the neurological substrate of its limited language, Cobb brought a noisy and jovial mynah bird to the third floor of the Bulfinch Building. The bird's small repertoire of communications was a source of delighted amusement to us all, as, ensconced in its cage in a corner of Cobb's office, it emitted its shrill wolf-whistle when an attractive young woman walked by in the corridor, or repeatedly cried out a raucous, "What's up, Doc?" Strangers passing casually through the unit must sometimes have come away with odd ideas about what was going on in the Department of Psychiatry!

But despite his scientific concern with bird brains, Cobb never gave up the simpler pleasures of bird-watching in the field. Sitting on the edge of his beloved salt marsh outside his summer



Dissecting a bird brain during the later years of his "retirement"

home in Little Compton, Rhode Island, he would spend hours watching the natural beauties of the local osprey, ducks, and sea birds of every shape and variety. His ability to recognize species at a distance with the naked eye was uncanny, as I learned during one of the last times I saw him. I had driven from Boston to Little Compton to visit him one lovely spring Saturday. After regaling me with a loon steak, which he cooked for my lunch (the first time I had ever encountered that culinary experience—

and, I am happy to say, the last!), we sat together surveying the bird-life on his treasured salt pond. "There's a ruddy duck," he said to me suddenly. All I could see toward the far shore a mile away was a shapeless and, to me, unidentifiable blur. "How can you tell?" I asked. "Look at it!" he replied laconically, and I realized that to his experienced eye every nuance of shape and movement and color, even at that distance, had an intimate meaning that escaped my unpracticed gaze.

Perhaps as a final lesson to his now aging junior colleague (and his pupil still), he shortly thereafter gave me a water-color sketch he had made of three ruddy ducks floating on a patch of sunny water. I have it still, framed and hung on my study wall as a reminder of the man who taught me so much—about birds and psychiatry and much more. And even more important, as I now realize in recalling these memories of one of Harvard Medical School's greatest professors, he showed me by example what it meant to be a physician-teacher. I can only hope that some of his tutelage has been passed on to his academic grandchildren. □



Swans on the Gunpowder River, by Stanley Cobb. A sepia wash with an overlay of white paint on the birds' wings. Courtesy of Mrs. Carl Binger.

The Selection and Performance of HMS Graduates in Residency Training

Report to the Alumni Council

by the Alumni Survey Committee (1983-84)

Carlton M. Akins '66 (chairman)

Laurence H. Beck '66

Warren Bennett '47

Albert B. Crum '57

David F. Hickok '56

Luis A. La Luz '79

Rodney C. Larcom '40

Daniel J. O'Connor '57

Donald N. Sweeny '40

William D. Winter '47

Four years ago the Bulletin published the Alumni Survey Committee Report on Premedical Education. Two years later, Jane Schaller '60, then president of the Alumni Council, asked the pertinent question: what about the other side of the admissions process; how do graduates perform? Again, the Alumni Survey Committee was asked to advise. Here is its report.

The report is based on two sorts of information. First we have the considered opinions, obtained by interview, of those in charge of residency programs at Harvard-affiliated hospitals. So far as can be ascertained, these opinions were consonant with the second sort of information obtained by survey through 200 questionnaires sent out to non-Harvard programs with at least one Harvard graduate in the five years from 1978 to 1983. The response rate was an incredibly good 70 percent.

The questionnaire carefully avoided comparison with other schools. It raised problems of interpreting value judgments in an objective way: for example, the phrase "failed to meet expectations." All things considered, the response was reassuring. Four out

of five completed the residency program they entered, rather remarkable in a world where competition is important and expectations are high. Nine out of 10 met or exceeded expectations. Less than half of the remaining 10 percent had problems in their relationships with patients, a reassuring finding when we stress humaneness in medicine. And is it surprising that three, or only three, failed to show up to begin their residency commitment? At least one, or 33 percent of these, had the good manners to notify the program director in advance!

The alumni will be interested in the widespread problem of accurate letters of reference. In an intensely competitive world, with everyone looking for negatives, a career may hinge on a mild or undocumented criticism. How then can one write an honest appraisal? Is the old-boy, telephone network the answer? The committee passed on that one.

The Alumni Council has thanked the Survey Committee for their excellent work. The Bulletin is happy to pass along their labors.

—J. Gordon Scannell

Over the past year the Alumni Survey Committee has evaluated the relationships between Harvard Medical School and residency training programs with recent HMS graduates. The committee's interest in this subject derives from many considerations: the absence of any formal method of evaluating HMS postgraduate performance, the elimination of numerical or letter grading and class rank from HMS student evaluation, anecdotal accounts of alumni failures in widely separated programs, and the expressed interest of the Alumni Council at its spring 1983 meeting. We first broached the subject with Dan Federman '53, dean for students and alumni, in May 1983 and planned our next three meetings around a survey of residency programs.

In October 1983 the committee met with Curtis Prout '41, chair of the Internship Advisory Committee; three fourth-year students who were applying to programs; S. Ward Casscells '78, who had written an article on internship for the *Bulletin*; and Dan Federman. We learned of the process of application to residency programs and the understandable anxiety it provokes in students.

Between February and May 1984 we met with the coordinators of the programs in medicine at Brigham and Women's, Beth Israel, and Massachusetts General hospitals, surgery at MGH, BIH, and New England Deaconess Hospital, and pediatrics at Children's Hospital. As more than one-third of HMS alumni currently train at Harvard-affiliated teaching hospitals (this figure has risen from 32 percent of the graduates in 1980 to 44 percent in 1984), we held interviews with these coordinators rather than ask them to fill out large numbers of questionnaires. Each director described his approach to resident selection. It became clear that personal experience with the student, in either a required clerkship or an elective rotation, is the most important factor to program directors in evaluating applicants from HMS to these programs—significantly more important than dean's letters and individual letters of recommendation.

In an effort to learn about those programs around the country that train the majority of HMS alumni, the committee sent a letter, questionnaire, and return envelope to the

directors of all non-Harvard programs with at least one graduate from 1978 to 1983. From the approximately 200 questionnaires sent out, we received 147 responses, a return rate of over 70 percent. These 147 responses covered 367 recent graduates.

The first part of the questionnaire asked program directors to evaluate whether alumni residents exceeded, met, or failed to meet the director's expectations in seven individual elements of graduate performance: medical knowledge, judgment, responsibility, stamina, motivation, interpersonal performance, and patient relationship. An eighth category measured overall performance.

To find out something about how those expectations are shaped by HMS, a second part of the questionnaire asked for an evaluation of the usefulness of the information the director received from HMS about students.

Performance Versus Expectations

Taking each answer to each category as a "case," we found that alumni met or exceeded expectations in 90 percent of cases and did not meet them in about 10 percent. Leaving out those who met expectations, we calculated that approximately three times as many graduates exceeded overall expectations as did not meet them. This ratio prevailed in the individual categories with three exceptions. Judgment and interpersonal performance produced lower exceed/fail ratios of two to one. Approximately 14 percent of graduates fell below expectations in interpersonal performance. In patient relationship the converse was true, with an exceed/fail ratio of approximately five to one and only six percent failing expectations.

Except for the patient relationship, stamina, and medical knowledge categories, a minimum of 10 percent did not meet expectations in each area. This figure does not represent a select group of graduates consistently falling below expectation in all categories. About one-fourth of graduates evaluated ranked below expectation in at least one category.

Incompleted Residencies

Program directors reported that 76 of the 367 graduates in the returned sample did not complete the residency

program they entered. It is possible that this percentage (21 percent) will ultimately be somewhat higher, since many residents in the sample are still in PGY-1 or PGY-2.

The directors provided enough information to determine, in most cases, the reason for not completing the residency. Thirty-two individuals (9 percent of the total sample) did not complete the program for reasons the committee considers potentially preventable. Twenty-eight left or were asked to leave because of poor performance or not having met expectations. The particular areas of performance that were unsatisfactory were fairly evenly distributed among clinical competence, judgment, and interpersonal relationships. Nine of these 28 left due to mutual dissatisfaction between the resident and the program; in each case performance had been judged poor up to that point. Two individuals left for unspecified personal reasons. One was asked to leave for unethical (and illegal) behavior. Three never showed up to begin their residency commitment. In only one of these three cases was the program director notified in advance.

The remaining 44 (12 percent of the total sample) of those 76 who did not complete their residency left because of career change (31), family move (7), health and personal problems (1), pregnancy and specialty change (1), or for unknown reasons (4). Although in a few cases the career change was planned (and known to the director), in most cases it was a true change in direction, usually into a program with less perceived stress.

Dean's and Individual Letters

The dean's letters are written by Curtis Prout and Dan Federman, and were described as being "on the optimistic side." They draw on a transcript of the academic record, direct personal knowledge of the candidate, and, when necessary, consultation with instructors. Students see their letters; they can correct errors of fact but not the overall assessment.

Program directors reported that the vast majority of dean's and individual letters of recommendation accurately reflected the graduate. However, 17 to 19 percent of the letters were felt to have overestimated the graduate—three to four times the number that understated the graduate.

No comparison of the quality of the reference material from HMS and that from other schools was requested.

Included in the questionnaire was the open-ended question, "How could the Harvard Medical School better help you in your consideration of its graduates?" Certain recurring themes are apparent in the written answers. Many program directors wanted more quantitative information, including grades, class rank, or a definition of "code words." Directors also requested more explicit information about potential weaknesses, interpersonal skills, and attitude. The complexities involved in conveying such information are apparent to the committee. It is unknown whether the lack of such information in letters is based largely on the problems of confidentiality, or whether the current school evaluation system does not provide adequately for the detection of these problems (which might, if known about, be helped during medical school). This question is particularly important because of the relatively large number (14 percent) of those who did not meet expectations in interpersonal performance.

A separate analysis was made of four groups of responses: not having met expectations in judgment, interpersonal performance, and overall performance; and non-completion of the residency program for potentially preventable reasons. These groups were correlated with the dean's and individual letters. The results are charted in the accompanying sidebar. (The totals differ slightly from the larger table; some questions were not answered, and in three cases the graduate did not appear for the residency.)

The interpretation of these data is particularly difficult. Did those program directors whose HMS graduates did not complete the program use their response to the questions about letters as an explanation for the outcome? Were the letters of recommendation too far "on the optimistic side?" If so, was it because insufficient information was available? This questionnaire does not answer these questions. We recommend an effort be made to answer them.

Conclusions

Over the past year the Alumni Survey Committee has heard from the direc-

tors of approximately 155 residency training programs with approximately 595 recent HMS graduates (147 programs with 367 graduates by questionnaire; the rest by personal interviews with local program directors).

Dean's and individual letters of recommendation are not very important for residency programs in Harvard-affiliated hospitals. Selection to these programs is based on clerkship performance and direct communication among Boston program directors.

In the absence of formal comprehensive grading and delineation of class standing, the dean's letter and individual letters of recommendation are very influential to programs outside Boston. Based on these letters and the other factors each program director uses in his or her selection process, 90 percent of HMS graduates met or exceeded expectation in residency performance. Ten percent did not.

At least 20 percent of graduates did not complete their original training program. Based on the information returned, it appears that one-half of these failures to complete programs were potentially preventable.

Over 80 percent of the dean's and individual letters were felt to reflect accurately or understate the graduates. Seventeen percent of the dean's and 19 percent of the individual letters overestimated the graduate. There was a high correlation of those who failed to complete residency, or to meet expectations in judgment, interpersonal performance, or overall performance, with dean's and individual letters that program directors felt overestimated those graduates.

Recommendations

- HMS evaluation of the performance of its graduates in residency programs should be an ongoing process.

The large number of responses to this survey and the frank answers and suggestions by the respondents suggest that this process could be beneficial.

- HMS should analyze the information returned about its graduates, and correlate it with medical school performance and expectations.

Problems described by residency program directors might have been identified and dealt with during the medical school years.

Responses to request "Please rate the performance of each graduate, with regard to your expectations, in each of the following categories."

	Exceeded expectations		Met expectations		Did not meet expectations	
	Number	Percent	Number	Percent	Number	Percent
Medical Knowledge	102	29%	225	63%	28	8%
Judgment	88	24%	236	65%	38	11%
Responsibility	103	29%	218	61%	37	10%
Stamina	101	29%	218	62%	35	9%
Motivation	121	34%	200	56%	36	10%
Interpersonal Performance	96	27%	210	59%	49	14%
Patient Relationship	100	29%	225	65%	23	6%
Overall Performance	96	28%	215	62%	35	10%

Responses to the question "How helpful was the information you received from Harvard Medical School?"

	Overestimated graduate		Accurately reflected graduate		Understated graduate	
	Number	Percent	Number	Percent	Number	Percent
Dean's Letter	56	17%	264	78%	17	5%
Individual Letters of recommendation	62	19%	255	76%	18	5%

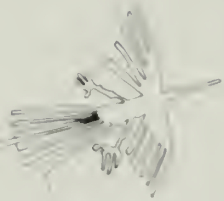
Correlation of graduates who did not meet expectations in one of three categories, or who did not complete residency for potentially preventable reasons, with their dean's and individual letters of recommendation.

	Dean's Letter			Individual Letters		
	Over-estimated graduate	Accurately reflected graduate	Under-stated graduate	Over-estimated graduate	Accurately reflected graduate	Under-stated graduate
Judgment failure	33	1	0	30	4	0
Interpersonal failure	30	14	0	31	12	0
Overall failure	34	1	0	33	1	0
Failure to complete program	27	3	0	25	5	0

- The dean's and individual letters of recommendation should be more objective.

Many program directors requested more quantitative data (grades, class rank). With the current evaluation system, this may not be possible.

Others requested a better definition of the applicant's weaknesses, especially in attitude and interpersonal skills. Ideally these difficulties should be recognized in medical school so they can be remedied. If they persist, they should be honestly described. □



The Travel Program Of

Alumni Flights Abroad



This is a private travel program especially planned for the alumni of Harvard, Yale, Princeton and certain other distinguished universities. Designed for the educated and intelligent traveler, it is specifically planned for the person who might normally prefer to travel independently, visiting distant lands and regions where it is advantageous to travel as a group. The itineraries follow a carefully planned pace which offers a more comprehensive and rewarding manner of travel, and the programs include great civilizations, beautiful scenery and important sights in diverse and interesting portions of the world:

TREASURES OF ANTIQUITY: The treasures of classical antiquity in Greece and Asia Minor and the Aegean Isles, from the actual ruins of Troy and the capital of the Hittites at Hattusas to the great city-states such as Athens and Sparta and to cities conquered by Alexander the Great (16 to 38 days). **VALLEY OF THE NILE:** An unusually careful survey of ancient Egypt that unfolds the art, the history and the achievements of one of the most remarkable civilizations the world has ever known (19 days). **MEDITERRANEAN ODYSSEY:** The sites of antiquity in the western Mediterranean, from Carthage and the Roman cities of North Africa to the surprising ancient Greek ruins on the island of Sicily, together with the island of Malta (23 days).

EXPEDITION TO NEW GUINEA: The primitive stone-age culture of Papua-New Guinea, from the spectacular Highlands to the tribes of the Sepik River and the Karawari, as well as the Baining tribes on the island of New Britain (22 days). The **SOUTH PACIFIC:** a magnificent journey through the "down under" world of New Zealand and Australia, including the Southern Alps, the New Zealand Fiords, Tasmania, the Great Barrier Reef, the Australian Outback, and a host of other sights. 28 days, plus optional visits to South Seas islands such as Fiji and Tahiti.

INDIA, CENTRAL ASIA AND THE HIMALAYAS: The romantic world of the Moghul Empire and a far-reaching group of sights, ranging from the Khyber Pass and the Taj Mahal to lavish forts and palaces and the snow-capped Himalayas of Kashmir and Nepal (26 or 31 days). **SOUTH OF BOMBAY:** The unique and different world of south India and Sri Lanka (Ceylon) that offers ancient civilizations and works of art, palaces and celebrated temples, historic cities, and magnificent beaches and lush tropical lagoons and canals (23 or 31 days).

THE ORIENT: The serene beauty of ancient and modern Japan explored in depth, together with the classic sights and civilizations of southeast Asia (30 days). **BEYOND THE JAVA SEA:** A different perspective of Asia, from headhunter villages in the jungle of Borneo and Batak tribal villages in Sumatra to the ancient civilizations of Ceylon and the thousand-year-old temples of central Java (34 days).

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